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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Dwayne C. Jones Examiner #: 71299 Date: 16APR06

Art Unit: 1614 Phone Number: 2-0578 Serial Number: 10/525,532

Location (Bldg/Room#): 3B37 (Mailbox #): 3C70 Results Format Preferred (circle): PAPER DISK

**********REM**********

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following: MPEP

Title of Invention: see attached sheet

Inventors (please provide full names): 11

Earliest Priority Date: 29 AUG 2002

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

Please search claims 16, 23 and 30

****

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Searcher: Jan

Searcher Phone #: 22504

Searcher Location: _____

Date Searcher Picked Up: 5/4/06

Date Completed: 5/4/06

Searcher Prep & Review Time: 15

Online Time: 35

Type of Search

_____ NA Sequence (#)

_____ AA Sequence (#)

✓ Structure (#)

_____ Bibliographic

_____ Litigation

_____ Fulltext

_____ Other

Vendors and cost where applicable

✓ STN _____ Dialog

_____ Questel/Orbit _____ Lexis/Nexis

_____ Westlaw _____ WWW/Internet

___ In-house sequence systems

___ Commercial ___ Oligomer ___ Score/Length

___ Interference ___ SPDI ___ Encode/Transl

_____ Other (specify)

STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number:

TO: Dwayne C Jones Location: 3b87 / 3c70 Thursday, May 04, 2006 Art Unit: 1614 Phone: 571-272-0578 Serial Number: 10 / 525532	From: Jan Delaval Location: Biotech-Chem Library Remsen 1a51 Phone: 571-272-2504 jan.delaval@uspto.gov

Search Notes

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
22507, Remsen 1d86

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk

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=> fil reg
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STRUCTURE FILE UPDATES:    3 MAY 2006  HIGHEST RN 882736-15-4
DICTIONARY FILE UPDATES:   3 MAY 2006  HIGHEST RN 882736-15-4

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TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

*********************************************************************
*                                                                   *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                   *
*********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

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experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d ide can tot l11

L11  ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2006 ACS on STN
RN   476148-82-0  REGISTRY
ED   Entered STN:  13 Dec 2002
CN   Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-,
     monohydrochloride, monohydrate (9CI)  (CA INDEX NAME)
MF   C17 H17 F N4 S . Cl H . H2 O
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL
CRN  (99487-25-9)
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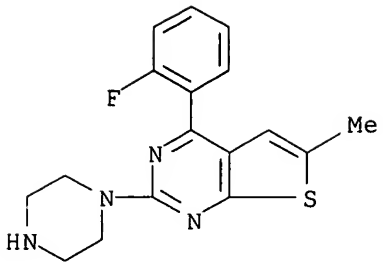

● HCl

● H_2O

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:229481

REFERENCE 2: 140:229465

REFERENCE 3: 140:87710

REFERENCE 4: 139:144007

REFERENCE 5: 137:380039

L11 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
RN 109348-38-1 REGISTRY
ED Entered STN: 25 Jul 1987
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, hydrochloride (9CI) (CA INDEX NAME)
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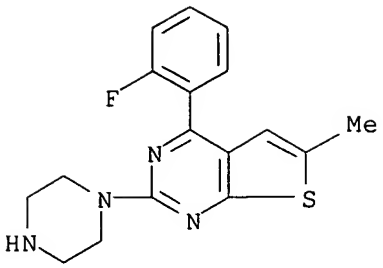
SR CA
LC STN Files: BIOTECHNO, CA, CAPLUS, EMBASE, PROUSDDR, SYNTHLINE
CRN (99487-25-9)

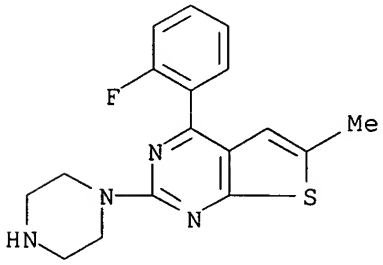


●x HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 107:59050

L11 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
RN **99487-26-0** REGISTRY
ED Entered STN: 21 Dec 1985
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN MCI 225
DR 135991-48-9
MF **C17 H17 F N4 S . Cl H**
SR CA
LC STN Files: ADISINSIGHT, BIOSIS, BIOTECHNO, CA, CAPLUS, CIN, EMBASE, IMSDRUGNEWS, IMSRESEARCH, MEDLINE, PHAR, PROMT, PROUSDDR, RTECS*, SCISEARCH, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
CRN (99487-25-9)



● HCl

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16 REFERENCES IN FILE CA (1907 TO DATE)
16 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:343543

REFERENCE 2: 140:229465

REFERENCE 3: 139:144007

REFERENCE 4: 137:380039

REFERENCE 5: 135:190298

REFERENCE 6: 133:99471

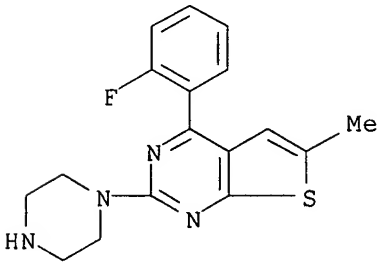
REFERENCE 7: 132:146650

REFERENCE 8: 132:44882

REFERENCE 9: 128:43723

REFERENCE 10: 126:233473

L11 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2006 ACS on STN
RN **99487-25-9** REGISTRY
ED Entered STN: 21 Dec 1985
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C17 H17 F N4 S**
CI COM
SR CA
LC STN Files: BIOTECHNO, CA, CAPLUS, EMBASE, PHAR, PROUSDDR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

13 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:343543

REFERENCE 2: 141:134099

REFERENCE 3: 141:134098

REFERENCE 4: 140:229481

REFERENCE 5: 140:229465

REFERENCE 6: 140:87710

REFERENCE 7: 139:144007

REFERENCE 8: 137:380039

REFERENCE 9: 130:10644

REFERENCE 10: 126:233473

=> d his

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     (FILE 'HOME' ENTERED AT 15:27:09 ON 04 MAY 2006)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 15:27:17 ON 04 MAY 2006
L1             1 S (WO2003-GB3720 OR GB2002-20064 OR GB2003-16115)/AP,PRN
               E CAVALLA D/AU
L2            95 S E3-E6
               E GRISTWOOD R/AU
L3            55 S E4-E7
               E ARACHNOVA/PA,CS
L4            46 S E3-E12
L5             9 S 4 2 FLUOROPHENYL 6 METHYL 2 1 PIPERAZIN? THIENO 2 3 D PYRIMID
L6             5 S L5 AND L1-L4
L7             9 S L1,L6,L5
               SEL RN

     FILE 'REGISTRY' ENTERED AT 15:30:10 ON 04 MAY 2006
L8            11 S E1-E11
L9             3 S L8 AND C17H17FN4S
L10            3 S 99487-25-9/CRN
L11            4 S L10,L9

     FILE 'HCAOLD' ENTERED AT 15:31:32 ON 04 MAY 2006
L12            0 S L11

     FILE 'HCAPLUS' ENTERED AT 15:31:34 ON 04 MAY 2006
L13           14 S MCI 225 OR MCI225
L14           22 S L11
L15           22 S L7,L13,L14
L16           19 S L15 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L17            5 S L1-L4 AND L15
L18            5 S L17 AND L16
L19            3 S L15 AND (ABUS? OR ?OBESIT? OR ?OBESE? OR WEIGHT(L)(GAIN? OR L
L20            6 S L15 AND (BODY(L)WEIGHT OR ?PARKINSON? OR ?FIBROMYALG? OR STRO
L21            6 S L15 AND MENTAL?
L22           10 S L19-L21
               E MENTAL/CT
L23            7 S L15 AND E4+OLD,NT
L24            1 S L15 AND E22+OLD,NT
L25            0 S L15 AND E23
L26            5 S L15 AND (E28 OR E29+OLD,NT)
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L27          0 S L15 AND E89
               E OBESITY/CT
L28          1 S L15 AND E3-E7
L29          1 S L15 AND E3+OLD,NT
               E BODY WEIGHT/CT
L30          1 S L15 AND E3-E5
L31          1 S L15 AND E3+OLD,NT
               E SUBSTANCE ABUSE/CT
               E E3+ALL
L32          1 S L15 AND E2
               E DRUGS OF ABUSE/CT
L33          1 S L15 AND E3+OLD,NT
               E DRUG ADDICTION/CT
L34          0 S L15 AND E3+OLD,NT
               E E3+ALL
L35          1 S L15 AND E2+OLD,NT
               E SMOKING/CT
L36          0 S L15 AND E3+OLD,NT
L37          0 S L15 AND E9
               E E6+ALL
L38          1 S L15 AND E2
               E TOBACCO/CT
L39          0 S L15 AND E3
L40          0 S L15 AND E267+OLD,NT
L41          1 S L15 AND E282+OLD,NT
L42          0 S L15 AND E285+OLD,NT
               E EATING DISORDER/CT
L43          1 S L15 AND E4
               E E4+ALL
L44          0 S L15 AND E2
               E OBSESSIVE/CT
               E E6+ALL
L45          1 S L15 AND E2
               E PREMENSTRUAL/CT
               E E5+ALL
L46          1 S L15 AND E2
               E MIGRAINE/CT
L47          0 S L15 AND E3
               E E3+ALL
L48          1 S L15 AND E2
               E HEADACHE/CT
L49          1 S L15 AND E3+OLD,NT
               E NAUSEA/CT
L50          2 S L15 AND E3+OLD,NT
               E VOMIT/CT
L51          2 S L15 AND E4+OLD,NT
               E EMESIS/CT
               E E3+ALL
               E E3+ALL
L52          2 S L15 AND E2,E3,E5,E7
               E FATIGUE/CT
L53          1 S L15 AND E3,E11+OLD,NT
L54          0 S L15 AND E17
               E FIBROMYALGIA/CT
               E E3+ALL
L55          2 S L15 AND E2
               E PARKSINSON/CT
               E PARKINSON/CT
L56          1 S L15 AND E7+OLD,NT
               E STROKE/CT
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                E E3+ALL
L57           1 S L15 AND E2
                E SCHIZOPHRENIA/CT
L58           1 S L15 AND E3+OLD,NT
L59          12 S L23-L58
L60          12 S L22,L59
L61          15 S L17,L60
L62           7 S L15 NOT L61
L63           5 S L62 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L64          20 S L61,L63

     FILE 'REGISTRY' ENTERED AT 15:48:25 ON 04 MAY 2006

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FILE LAST UPDATED: 3 May 2006  (20060503/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d l64 all hitstr tot

L64  ANSWER 1 OF 20  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:610068  HCAPLUS
DN   141:134099
ED   Entered STN:  30 Jul 2004
TI   Method of treating nausea, vomiting, or retching by
     administering a 5-HT3 receptor antagonist and noradrenaline reuptake
     inhibitor
IN   Landau, Steven B.; Miller, Cheryl L.; Thor, Karl Bruce
PA   Dynogen Pharmaceuticals, Inc., USA
SO   PCT Int. Appl., 66 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K
CC   1-9 (Pharmacology)
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2004062624        A2    20040729    WO 2004-US809          20040113
     WO 2004062624        A3    20050407
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            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ
    AU 2004204827        A1    20040729    AU 2004-204827         20040113
    CA 2512022           AA    20040729    CA 2004-2512022        20040113
    US 2004147510        A1    20040729    US 2004-757981         20040113
    EP 1567163           A2    20050831    EP 2004-701830         20040113
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    BR 2004006748        A     20051220    BR 2004-6748           20040113
    US 2004254171        A1    20041216    US 2004-846978         20040514
    US 2004254172        A1    20041216    US 2004-846979         20040514
PRAI US 2003-440076P     P     20030113
    US 2003-492478P      P     20030804
    US 2004-757981       A1    20040113
    WO 2004-US809        W     20040113
CLASS
 PATENT NO.      CLASS  PATENT FAMILY CLASSIFICATION CODES
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 WO 2004062624   ICM    A61K
                 IPCI   A61K [ICM,7]
                 IPCR   A61K0031-135 [I,A]; A61K0031-135 [I,C]; A61K0031-519
                        [I,A]; A61K0031-519 [I,C]; A61K0031-535 [I,A];
                        A61K0031-535 [I,C]; A61K0031-551 [I,A]; A61K0031-551
                        [I,C]
 AU 2004204827   IPCI   A61K0031-551 [ICM,7]
 CA 2512022      IPCI   A61K0031-551 [ICM,7]; A61K0031-135 [ICS,7];
                        A61K0031-519 [ICS,7]; A61K0031-535 [ICS,7]
                 IPCR   A61K0031-135 [I,A]; A61K0031-135 [I,C]; A61K0031-519
                        [I,A]; A61K0031-519 [I,C]; A61K0031-535 [I,A];
                        A61K0031-535 [I,C]; A61K0031-551 [I,A]; A61K0031-551
                        [I,C]
                 NCL    514/218.000
                 ECLA   A61K031/135; A61K031/519; A61K031/535; A61K031/551
 US 2004147510   IPCI   A61K0031-551 [ICM,7]; A61K0031-519 [ICS,7]
                 IPCR   A61K0031-519 [I,A]; A61K0031-519 [I,C]; A61K0031-551
                        [I,A]; A61K0031-551 [I,C]
                 NCL    514/218.000
 EP 1567163      IPCI   A61K0031-551 [ICM,7]; A61K0031-519 [ICS,7];
                        A61K0031-535 [ICS,7]; A61K0031-135 [ICS,7]
                 IPCR   A61K0031-135 [I,A]; A61K0031-135 [I,C]; A61K0031-519
                        [I,A]; A61K0031-519 [I,C]; A61K0031-535 [I,A];
                        A61K0031-535 [I,C]; A61K0031-551 [I,A]; A61K0031-551
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 BR 2004006748   IPCR   A61K0031-135 [I,C]; A61K0031-519 [I,C]; A61K0031-535
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                        A61K0031-519 [I,A]; A61K0031-535 [I,A]; A61K0031-551
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                 ECLA   A61K031/135; A61K031/519; A61K031/535; A61K031/551
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                 IPCR   A61K0031-519 [I,A]; A61K0031-519 [I,C]; A61K0031-551
                        [I,A]; A61K0031-551 [I,C]
                 NCL    514/218.000
 US 2004254172   IPCI   A61K0031-551 [ICM,7]; A61K0031-519 [ICS,7]
                 IPCR   A61K0031-519 [I,A]; A61K0031-519 [I,C]; A61K0031-551
                        [I,A]; A61K0031-551 [I,C]
                 NCL    514/218.000
OS   MARPAT 141:134099
AB   The invention relates to a method of treating nausea,
```

vomiting, retching or any combination thereof in a subject in need of treatment. The method comprises administering to a subject in need of treatment a therapeutically effective amount of a compound that has 5-HT3 receptor antagonist activity and NorAdrenaline Reuptake Inhibitor (NARI) activity. The invention further relates to a method of treating **nausea**, **vomiting**, retching or any combination thereof in a subject in need thereof, comprising coadministering to said subject a first amount of a 5-HT3 antagonist and a second amount of a NARI, wherein the first and second amts. together comprise a therapeutically effective amount or are each present in a therapeutically effective amount In addition, the method of the invention comprises administering a NARI alone. A pharmaceutical composition comprising: (a) a first amount of a 5-HT3 receptor antagonist; and (b) a second amount of a noradrenaline reuptake inhibitor is also claimed.

ST **nausea vomiting** retching treatment serotonin antagonist noradrenaline reuptake inhibitor

IT 5-HT antagonists
(5-HT3; method of treating **nausea**, **vomiting**, or retching by administering a 5-HT3 receptor antagonist and noradrenaline reuptake inhibitor)

IT **Antiemetics**
Combination chemotherapy
Drug delivery systems
Human
Nausea
Vomiting
(method of treating **nausea**, **vomiting**, or retching by administering a 5-HT3 receptor antagonist and noradrenaline reuptake inhibitor)

IT Nervous system agents
(noradrenaline reuptake inhibitors; method of treating **nausea**, **vomiting**, or retching by administering a 5-HT3 receptor antagonist and noradrenaline reuptake inhibitor)

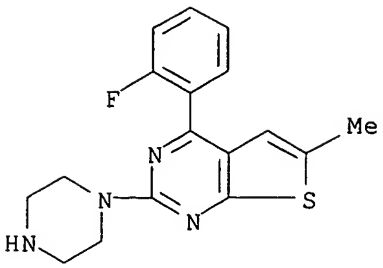
IT 50-47-5, Desipramine 72-69-5, Nortriptyline 10262-69-8, Maprotiline 23047-25-8, Lofepramine 34911-55-2, Bupropion 40796-97-2, Bemesetron 46817-91-8, Viloxazine 56433-44-4, Oxaprotiline 71620-89-8, Reboxetine 76496-68-9, Levoprotiline 83015-26-3, Tomoxetine 89565-68-4, Tropisetron 90182-92-6, (±) Zacopride 92623-85-3, Milnacipran 93413-69-5, Venlafaxine **99487-25-9 99487-25-9D**, salts 99614-02-5, Ondansetron 101626-70-4, Talipexole 107429-63-0, Lintopride 109889-09-0, Granisetron 112727-80-7 115956-12-2, Dolasetron 116539-59-4, Duloxetine 120635-74-7, Cilansetron 122852-42-0, Alosetron 123040-69-7, Azasetron 123258-84-4, Itasetron 123482-22-4, Zatosetron 127595-11-3, DAU-6236 132036-88-5 134296-40-5, BIMU-8 135729-61-2, Palonosetron 141549-75-9, Indisetron 143257-98-1, Lerisetron 151213-86-4, E-3620 153608-99-2, YM 114 160472-97-9, N-3389 162413-52-7, GK-128
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method of treating **nausea**, **vomiting**, or retching by administering a 5-HT3 receptor antagonist and noradrenaline reuptake inhibitor)

IT **99487-25-9 99487-25-9D**, salts
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method of treating **nausea**, **vomiting**, or retching by administering a 5-HT3 receptor antagonist and noradrenaline reuptake inhibitor)

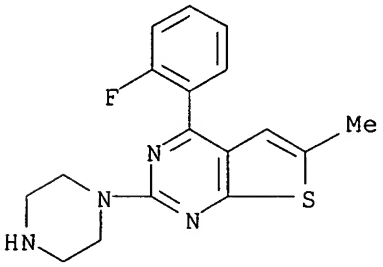
RN 99487-25-9 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-

(9CI) (CA INDEX NAME)



RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-
(9CI) (CA INDEX NAME)



L64 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:203673 HCAPLUS
DN 140:229481
ED Entered STN: 14 Mar 2004
TI New therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-d]pyrimidine**
IN **Cavalla, David; Gristwood, Robert William**
PA **Arachnova Therapeutics Ltd., UK**
SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K0031-519
ICS A61P0025-06; A61P0025-16; A61P0025-30; A61P0043-00
CC 1-12 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004019948	A1	20040311	WO 2003-GB3720	20030828 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

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    CN 1678322          A     20051005    CN 2003-820617         20030828 <--
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PRAI GB 2002-20064      A     20020829  <--
    GB 2003-16115       A     20030709  <--
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CLASS
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                 ECLA   A61K031/519
 JP 2006500427   IPCI   A61K0031-519 [I,A]; A61P0001-08 [I,A]; A61P0001-14
                        [I,A]; A61P0003-04 [I,A]; A61P0013-00 [I,A];
                        A61P0015-00 [I,A]; A61P0025-00 [I,A]; A61P0025-04
                        [I,A]; A61P0025-06 [I,A]; A61P0025-08 [I,A];
                        A61P0025-16 [I,A]; A61P0025-18 [I,A]; A61P0025-22
                        [I,A]; A61P0025-30 [I,A]; A61P0025-34 [I,A];
                        A61P0031-14 [I,A]; A61P0035-00 [I,A]; A61P0039-00
                        [I,A]; A61P0043-00 [I,A]; C07D0495-04 [I,A]
                 FTERM  4C071/AA01; 4C071/BB01; 4C071/CC02; 4C071/CC21;
                        4C071/EE13; 4C071/FF04; 4C071/GG01; 4C071/GG02;
                        4C071/HH17; 4C071/JJ01; 4C071/JJ08; 4C071/LL01;
                        4C086/AA01; 4C086/AA02; 4C086/CB26; 4C086/MA01;
                        4C086/MA04; 4C086/NA14; 4C086/ZA02; 4C086/ZA06;
                        4C086/ZA08; 4C086/ZA18; 4C086/ZA22; 4C086/ZA70;
                        4C086/ZA71; 4C086/ZA73; 4C086/ZA75; 4C086/ZA81;
                        4C086/ZA94; 4C086/ZB11; 4C086/ZB15; 4C086/ZB33;
                        4C086/ZC02; 4C086/ZC14; 4C086/ZC39; 4C086/ZC41
AB   4-(2-Fluorophenyl)-6-
     methyl-2-(1-piperazinyl)
```

thieno[2,3-d]pyrimidine or
a salt thereof has value in the treatment of **fibromyalgia, obesity, weight gain,** and other conditions.

ST thienopyrimidine deriv **fibromyalgia obesity wt gain** treatment

IT **Drugs of abuse**
(**abuse of**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT Chemotherapy
Radioactivity
(**emesis** induced by; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Muscle, disease**
(**fibromyalgia**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Headache**
(**migraine**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Mental and behavioral disorders**
(**obsession-compulsion**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Ovarian cycle**
(**premenstrual syndrome**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Tobacco smoke**
(**smoking** cessation; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Behavior**
(**smoking, smoking** cessation; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Brain, disease**
(**stroke**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **Antiemetics**
Antimigraine agents
Antiobesity agents
Antiparkinsonian agents
Antipsychotics
Cardiovascular agents

Drug dependence
Eating disorders
Fatigue, biological
Nausea
Nervous system agents
Obesity
Parkinson's disease
Schizophrenia
Vomiting
(therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

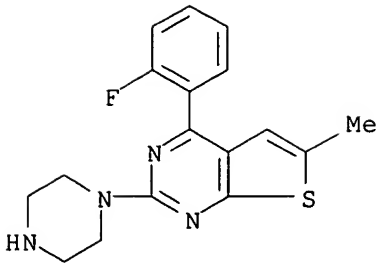
IT **Body weight**
(**weight gain**; therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

IT **99487-25-9 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

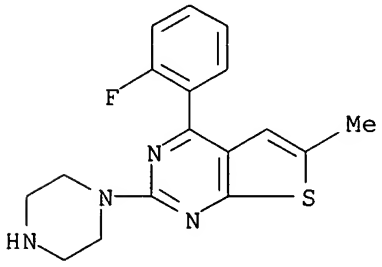
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Eguchi, J; PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR 1995, V51(4), P935 HCAPLUS
(2) Eguchi, J; PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR 2001, V68(4), P677 HCAPLUS
(3) Heal, D; INTERNATIONAL JOURNAL OF OBESITY 1998, V22(SUPPL 1), PS18
(4) Iyengar, S; WO 0015223 A 2000 HCAPLUS
(5) Lilly Co Eli; WO 9612485 A 1996 HCAPLUS
(6) Mitsubishi Chem Ind; EP 0150469 A 1985 HCAPLUS
(7) Rao, S; RHEUMATIC DISEASES CLINICS OF NORTH AMERICA 2002, V28(2), P235
(8) Sepracor Inc; WO 02060427 A 2002
(9) Wyeth; WO 02064543 A 2002 HCAPLUS

IT **99487-25-9 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic uses of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine**)

RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 476148-82-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride, monohydrate (9CI) (CA INDEX NAME)



● HCl

● H_2O

L64 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:203555 HCAPLUS
DN 140:229465
ED Entered STN: 14 Mar 2004
TI New therapeutic use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-d]pyrimidine**
IN Bardsley, Hazel Judith; **Cavalla, David; Gristwood, Robert William**
PA Germany
SO U.S. Pat. Appl. Publ., 4 pp., Cont.-in-part of Appl. No. PCT/GB2002/02388. CODEN: USXXCO
DT Patent
LA English
IC ICM A61K0031-519
INCL 514252160
CC 1-11 (Pharmacology)
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI US 2004048874 A1 20040311 US 2003-617847 20030710
WO 2002094249 A1 20021128 WO 2002-GB2388 20020521
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2005200045 A1 20050127 AU 2005-200045 20050107
PRAI GB 2001-12494 A 20010522
WO 2002-GB2388 A2 20020521
GB 2002-16027 A 20020710
AU 2002-307872 A3 20020521

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004048874	ICM	A61K0031-519
	INCL	514252160
	IPCI	A61K0031-519 [ICM,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
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WO 2002094249	IPCI	A61K0031-00 [ICM,7]; A61P0025-02 [ICS,7]; A61P0025-04 [ICS,7]; A61P0025-00 [ICS,7]
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AB **4-(2-Fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-D]pyrimidine** or a salt thereof is useful for the treatment of pain.

ST fluorophenylmethylpiperazinylthienopyrimidine analgesic pain **fibromyalgia** irritable bowel syndrome diarrhea constipation

IT Intestine, disease
(constipation, alternating; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT **Muscle, disease**
(**fibromyalgia**; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Analgesics
Diarrhea
Human
Sex
(fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Intestine, disease
(functional; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Intestine, disease
(irritable bowel syndrome, constipation-predominant; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Intestine, disease
(irritable bowel syndrome; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Pain

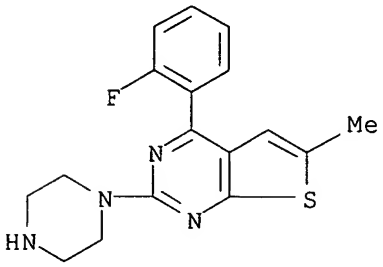
(neuropathic; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT Pain
(nociceptive; fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT 53-86-1, Indomethacin **99487-25-9 99487-26-0, MCI-225 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

IT **99487-25-9 99487-26-0, MCI-225 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fluorophenylmethylpiperazinylthienopyrimidine for treatment of pain)

RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 99487-26-0 HCAPLUS
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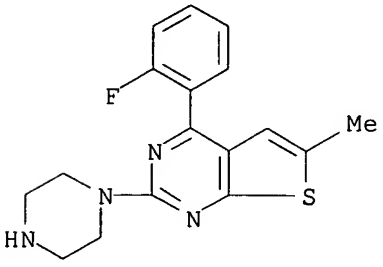

● HCl

RN 476148-82-0 HCAPLUS
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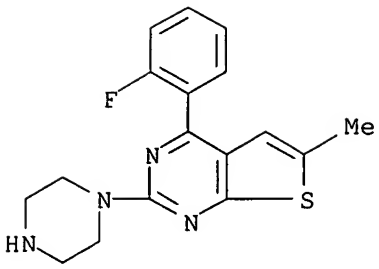

● HCl

● H_2O

L64 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:41283 HCAPLUS
DN 140:87710
ED Entered STN: 18 Jan 2004
TI **4-(2-Fluorophenyl)-6-methyl-2(1-piperazinyl) thieno(2,3-D) pyrimidine** in the treatment of functional bowel disorder
IN **Cavalla, David; Gristwood, Robert William**
PA **Arachnova Therapeutics Ltd., UK**
SO PCT Int. Appl., 9 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K0031-519
ICS A61P0001-00
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	BR 2003012511	A	20050412	BR 2003-12511	20030709
	CN 1668307	A	20050914	CN 2003-816290	20030709
	JP 2005533829	T2	20051110	JP 2004-519012	20030709
	US 2005239792	A1	20051027	US 2004-519594	20041228
PRAI	GB 2002-16027	A	20020710		
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	WO 2003-GB2974	W	20030709		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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	IPCI	A61K0031-519 [ICM,7]; A61P0001-00 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
	ECLA	A61K031/519
CA 2491836	IPCI	A61K0031-519 [ICM,7]; A61P0001-00 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
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EP 1519728	IPCI	A61K0031-519 [ICM,7]; A61P0001-00 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
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	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
CN 1668307	IPCI	A61K0031-519 [ICM,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
JP 2005533829	IPCI	A61K0031-519 [ICM,7]; A61P0001-00 [ICS,7]; A61P0001-10 [ICS,7]; A61P0001-12 [ICS,7]; C07D0495-04 [ICS,7]; C07D0495-00 [ICS,7]
	FTERM	4C071/AA01; 4C071/BB01; 4C071/CC02; 4C071/CC21; 4C071/EE13; 4C071/FF05; 4C071/GG02; 4C071/JJ08; 4C071/LL01; 4C086/AA01; 4C086/AA02; 4C086/CB29; 4C086/MA01; 4C086/MA04; 4C086/MA52; 4C086/NA14; 4C086/ZA66; 4C086/ZA73
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	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]; C07D0498-00 [I,C]; C07D0498-02 [I,A]
	NCL	514/252.160

AB The use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-d]pyrimidine** or a salt for the manufacture of a medicament for the treatment of a functional bowel disorder is disclosed.

ST irritable bowel syndrome fluorophenylmethylpiperazinyl thienopyrimidine

IT Intestine, disease
((fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)

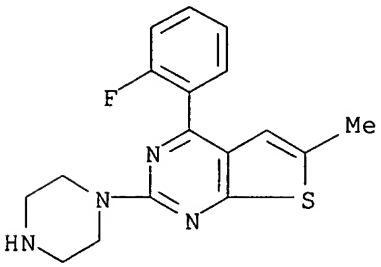
IT Intestine, disease
(constipation, with irritable bowel syndrome; (fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)

IT Human
(female; (fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)

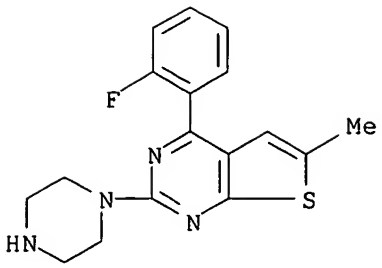
IT Intestine, disease
(irritable bowel syndrome; (fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)

IT Diarrhea
(with irritable bowel syndrome; (fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)

IT **99487-25-9 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
((fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Crowell, M; AMERICAN JOURNAL OF MANAGED CARE 2001, V7(8 SUPPL), PS252 MEDLINE
(2) Eguchi, J; PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR 2001, V68(4), P677 HCAPLUS
(3) Merck Patent Gmbh; DE 10063223 A 2002 HCAPLUS
(4) Ninomiya, K; US 4695568 A 1987 HCAPLUS
(5) Wayne, M; US 6284770 B1 2001 HCAPLUS
IT **99487-25-9 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
((fluorophenyl)methyl(piperazinyl)thienopyrimidine in the treatment of functional bowel disorder)
RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 476148-82-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride, monohydrate (9CI) (CA INDEX NAME)



● HCl

● H_2O

L64 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:610268 HCAPLUS
DN 139:144007
ED Entered STN: 08 Aug 2003
TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-d]pyrimidine** for treating urinary incontinence
IN **Cavalla, David; Gristwood, Robert William**
PA **Arachnova Therapeutics Ltd., UK**
SO PCT Int. Appl., 9 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K0031-519
ICS A61P0013-10
CC 1-12 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003063873	A1	20030807	WO 2003-GB374	20030129
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2474851	AA	20030807	CA 2003-2474851	20030129
	EP 1469853	A1	20041027	EP 2003-702713	20030129
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003007369	A	20041214	BR 2003-7369	20030129
	CN 1625402	A	20050608	CN 2003-803046	20030129

	JP 2005516977	T2	20050609	JP 2003-563563	20030129
	US 2005222162	A1	20051006	US 2004-502827	20040727
PRAI	GB 2002-2265	A	20020131		
	WO 2003-GB374	W	20030129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003063873	ICM	A61K0031-519
	ICS	A61P0013-10
	IPCI	A61K0031-519 [ICM,7]; A61P0013-10 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
	ECLA	A61K031/519
CA 2474851	IPCI	A61K0031-519 [ICM,7]; A61P0013-10 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
EP 1469853	IPCI	A61K0031-519 [ICM,7]; A61P0013-10 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
BR 2003007369	IPCI	A61K0031-519 [ICM,7]; A61P0013-10 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
CN 1625402	IPCI	A61K0031-519 [ICM,7]; A61P0013-10 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
JP 2005516977	IPCI	A61K0031-519 [ICM,7]; A61P0013-02 [ICS,7]; C07D0495-04 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
	FTERM	4C071/AA01; 4C071/BB01; 4C071/CC02; 4C071/CC21; 4C071/EE12; 4C071/FF05; 4C071/GG02; 4C071/JJ05; 4C071/LL01; 4C086/AA01; 4C086/AA02; 4C086/CB29; 4C086/MA01; 4C086/MA04; 4C086/NA14; 4C086/ZA81; 4C086/ZA84
US 2005222162	IPCI	A61K0031-519 [ICM,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
	NCL	514/252.160
	ECLA	A61K031/519

AB 4-(2-Fluorophenyl)-6-methyl-2-(-piperazinyl)thieno[2,3-d]pyrimidine or a salt thereof is useful for the treatment of urinary incontinence.

ST piperazinylthienopyrimidine deriv urinary incontinence treatment

IT Bladder, disease
(incontinence; piperazinylthienopyrimidine derivative for treating urinary incontinence)

IT **99487-25-9 99487-26-0, MCI 225**
476148-82-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(piperazinylthienopyrimidine derivative for treating urinary incontinence)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Chen, H; BRITISH JOURNAL OF PHARMACOLOGY 1990, V101(1), P212 HCAPLUS
(2) Eguchi, J; PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR 2001, V68(4), P677 HCAPLUS
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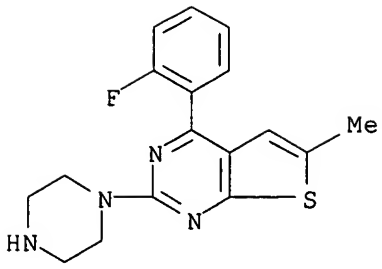
(4) Thor, K; US 5744474 A 1998 HCAPLUS
(5) Wu, Y; JAPANESE JOURNAL OF PHARMACOLOGY 2000, V83(1), P31 HCAPLUS

IT **99487-25-9 99487-26-0, MCI 225**
476148-82-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(piperazinylthienopyrimidine derivative for treating urinary incontinence)

RN 99487-25-9 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 99487-26-0 HCAPLUS
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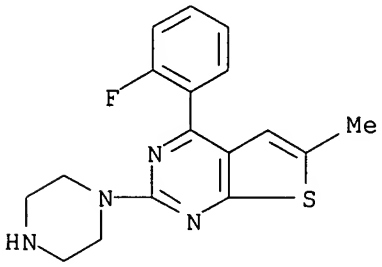
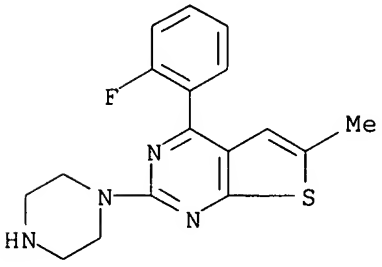


● HCl

RN 476148-82-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride, monohydrate (9CI) (CA INDEX NAME)



● HCl

H_2O

L64 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:905835 HCAPLUS
DN 137:380039
ED Entered STN: 29 Nov 2002
TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-d]pyrimidine** for the treatment of pain
IN Bardsley, Hazel Judith; **Gristwood, Robert William; Cavalla, David**
PA **Arachnova Therapeutics Ltd., UK**
SO PCT Int. Appl., 8 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K0031-00
ICS A61P0025-02; A61P0025-04
CC 1-11 (Pharmacology)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002094249	A1	20021128	WO 2002-GB2388	20020521
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2447465	AA	20021128	CA 2002-2447465	20020521
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	BR 2002009956	A	20040420	BR 2002-9956	20020521
	CN 1511029	A	20040707	CN 2002-810378	20020521
	JP 2004531557	T2	20041014	JP 2002-590968	20020521
	JP 3749519	B2	20060301		
	JP 2004168692	A2	20040617	JP 2002-335342	20021119
	US 2004048874	A1	20040311	US 2003-617847	20030710
	AU 2005200045	A1	20050127	AU 2005-200045	20050107
PRAI	GB 2001-12494	A	20010522		
	AU 2002-307872	A3	20020521		
	WO 2002-GB2388	W	20020521		
	GB 2002-16027	A	20020710		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002094249	ICM	A61K0031-00
	ICS	A61P0025-02; A61P0025-04
	IPCI	A61K0031-00 [ICM,7]; A61P0025-02 [ICS,7]; A61P0025-04 [ICS,7]; A61P0025-00 [ICS,7]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]
	ECLA	A61K031/519
CA 2447465	IPCI	A61K0031-00 [ICM,7]; A61P0025-02 [ICS,7]; A61P0025-04 [ICS,7]; A61P0025-00 [ICS,7]
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EP 1390022	IPCI	A61K0031-00 [ICM,7]; A61P0025-02 [ICS,7]; A61P0025-04

[ICS,7]; A61P0025-00 [ICS,7]
IPCR A61K0031-519 [I,A]; A61K0031-519 [I,C]
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IPCR A61K0031-519 [I,A]; A61K0031-519 [I,C]
CN 1511029 IPCI A61K0031-00 [ICM,7]; A61P0025-02 [ICS,7]; A61P0025-04 [ICS,7]; A61P0025-00 [ICS,7]
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JP 2004531557 IPCI A61K0031-519 [I,A]; A61P0025-04 [I,A]; A61P0025-00 [I,C]; C07D0495-04 [I,A]; C07D0495-00 [I,C]
IPCR A61K0031-519 [I,A]; A61K0031-519 [I,C]
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JP 2004168692 IPCI A61K0031-519 [ICM,7]; A61P0025-04 [ICS,7]; A61P0025-24 [ICS,7]; A61P0025-00 [ICS,7]; A61P0029-00 [ICS,7]; A61P0043-00 [ICS,7]; C07D0495-04 [ICS,7]; C07D0495-00 [ICS,7]
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US 2004048874 IPCI A61K0031-519 [ICM,7]
IPCR A61K0031-519 [I,A]; A61K0031-519 [I,C]
NCL 514/252.160
ECLA A61K031/519
AU 2005200045 IPCI A61K0031-00 [ICM,7]; A61P0025-04 [ICS,7]; A61P0025-02 [ICS,7]; A61P0025-00 [ICS,7]
IPCR A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61P0025-00 [I,C]; A61P0025-02 [I,A]; A61P0025-04 [I,A]

AB **4-(2-Fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno[2,3-D]pyrimidine** or a salt thereof is useful for the treatment of pain.

ST thienopyrimidine deriv pain treatment; analgesic thienopyrimidine deriv

IT Inflammation
(inflammatory pain; thienopyrimidine deriv.for treatment of pain)

IT Nerve, disease
(neuropathy, neuropathic pain; thienopyrimidine deriv.for treatment of pain)

IT Analgesics
Pain
(thienopyrimidine deriv.for treatment of pain)

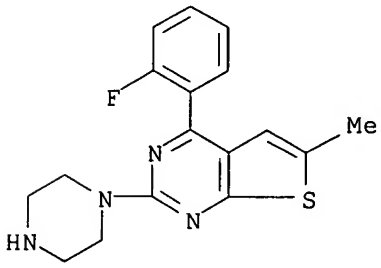
IT **99487-25-9 99487-26-0, MCI 225 476148-82-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thienopyrimidine deriv.for treatment of pain)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

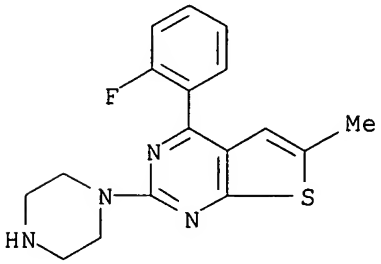
RE

(1) Mitsubishi Chemical Industries Ltd; EP 0150469 A 1985 HCAPLUS

(2) Mitsubishi Chemical Industries Ltd; US 4695568 A 1987 HCAPLUS
IT **99487-25-9 99487-26-0, MCI 225**
476148-82-0
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thienopyrimidine deriv.for treatment of pain)
RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)

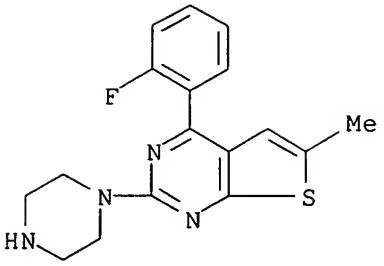


RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 476148-82-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride, monohydrate (9CI) (CA INDEX NAME)



● HCl

● H_2O

L64 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:315400 HCAPLUS
DN 135:190298
ED Entered STN: 03 May 2001
TI The anxiolytic-like effect of **MCI-225**, a selective NA reuptake inhibitor with 5-HT3 receptor antagonism
AU Eguchi, J.; Inomata, Y.; Saito, K.-I.
CS Pharmaceuticals Research Laboratory I, Yokohama Research Center, Mitsubishi-Tokyo Pharmaceuticals (MTP), Inc., Kamoshida-cho, Aoba-ku, Yokohama, 227-0033, Japan
SO Pharmacology, Biochemistry and Behavior (2001), 68(4), 677-683
CODEN: PBBHAU; ISSN: 0091-3057
PB Elsevier Science Inc.
DT Journal
LA English
CC 1-11 (Pharmacology)
AB We have previously reported that **MCI-225**, a selective noradrenaline (NA) reuptake inhibitor with serotonin (5-HT)3 receptor antagonism, shows antidepressant-like properties in expts. using rodents. In this study, we investigated the effect of **MCI-225** in anxiety models in comparison with diazepam, ondansetron, maprotiline, imipramine, and trazodone. In social interaction (SI) test in rats, **MCI-225** (10 and 30 mg/kg, po), diazepam (1-10 mg/kg, po), and a selective 5-HT3 receptor antagonist ondansetron (1 mg/kg, po) significantly increased SI to an unfamiliar partner under high light conditions without changes in ambulation. The increase in SI induced by **MCI-225** and ondansetron was blocked by a 5-HT3 agonist, 1-(m-Chlorophenyl)biguanide (mCPBG, 1 mg/kg, i.p.), which did not change SI when administered alone. **MCI-225** (10 mg/kg, po) showed comparable anxiolytic-like effect between single and 5-day repeated administration. On the other hand, maprotiline, trazodone, and imipramine did not affect SI at doses of 3-30 mg/kg, po. In the elevated plus-maze test in rats, **MCI-225** (10-100 mg/kg, po) increased the number of entries into the open arms only, while diazepam increased not only the number of open-arms entries (30 mg/kg, po), but also the total number of entries (10 mg/kg, po). Ondansetron (0.001-1 mg/kg, po) was less effective. Maprotiline, imipramine, and trazodone did not affect the number

of open-arm entries, while trazodone and imipramine (100 mg/kg, po) decreased the total number of entries. These results show that **MCI -225** has an anxiolytic-like effect without causing sedation and suggest that the 5-HT3 receptor antagonism of **MCI-225** probably contributes to its anxiolytic-like property.

ST anxiolytic **MCI 225** serotonin S3 antagonist

IT 5-HT antagonists
(5-HT3; anxiolytic activity of 5-HT3 antagonist **MCI-225** in comparison to other drugs and absence of sedative side effects)

IT Anxiolytics
(anxiolytic activity of 5-HT3 antagonist **MCI-225** in comparison to other drugs and absence of sedative side effects)

IT **Mental activity**
(sedation; anxiolytic activity of 5-HT3 antagonist **MCI-225** in comparison to other drugs and absence of sedative side effects)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anxiolytic activity of 5-HT3 antagonist **MCI-225** in comparison to other drugs and absence of sedative side effects)

IT 50-49-7, Imipramine 439-14-5, Diazepam 10262-69-8, Maprotiline 19794-93-5, Trazodone 99614-02-5, Ondansetron
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comparison standard; anxiolytic activity of 5-HT3 antagonist **MCI -225** in comparison to other drugs and absence of sedative side effects)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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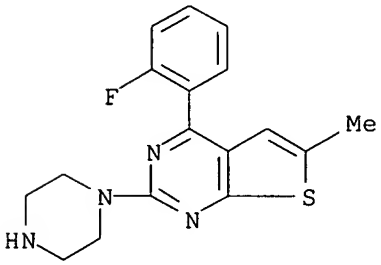
IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anxiolytic activity of 5-HT3 antagonist **MCI-225** in comparison to other drugs and absence of sedative side effects)

RN 99487-26-0 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:369092 HCAPLUS
DN 133:99471
ED Entered STN: 04 Jun 2000
TI Effects of acute and chronic administration of **MCI-225**, a new selective noradrenaline reuptake inhibitor with 5-HT3 receptor blocking action, on extracellular noradrenaline levels in the hypothalamus of stressed rats
AU Wu, Ying-Liang; Yoshida, Masami; Emoto, Hiroyuki; Ishii, Hideo; Koga, Kiminori; Tanaka, Masatoshi
CS Department of Pharmacology, Kurume University School of Medicine, Kurume, 830-0011, Japan
SO Japanese Journal of Pharmacology (**2000**), 83(1), 31-38
CODEN: JJPAAZ; ISSN: 0021-5198
PB Japanese Pharmacological Society
DT Journal
LA English
CC 1-11 (Pharmacology)
AB In the present study, we investigated the effects of acute and chronic systemic administration of **MCI-225** (**4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine** monohydrate hydrochloride), a

newly-developed selective noradrenaline (NA) reuptake inhibitor with 5-HT3-receptor-blocking action, on extracellular NA levels in the hypothalamus of stressed and non-stressed rats by utilizing intracerebral microdialysis. Acute administration of **MCI-225** (3 and 10 mg/kg, p.o.) significantly and dose-dependently increased extracellular NA levels in the hypothalamus in non-stressed rats. Footshock for 20 min also significantly increased NA levels in the hypothalamus of both groups of rats pretreated with vehicle and **MCI-225**. Although chronic administration of **MCI-225** (3 or 10 mg/kg, p.o. for 14 days) did not alter the basal extracellular NA levels in the hypothalamus, the stress-induced increases in extracellular NA levels were significantly lower in rats chronically treated with **MCI-225** (10 mg/kg) than those of rats pretreated with vehicle for the same period. The increase in extracellular NA levels induced by **MCI-225** challenge (3 or 10 mg/kg, p.o.) were not different between rats chronically treated with **MCI-225** or vehicle. These results suggest that **MCI-225** enhances extracellular NA levels in the hypothalamus in both non-stressed and stressed rats by inhibiting NA uptake and that chronic systemic administration of **MCI-225** did not alter basal extracellular NA levels, but reduced the increase in NA release caused by footshock stress. These data suggest the possibility that **MCI-225** might possess anxiolytic and/or antidepressant properties.

ST **MCI225** noradrenaline hypothalamus stress anxiolytic antidepressant; fluorophenylmethyl piperazinyl thienopyrimidine **MCI225** anxiolytic antidepressant

IT Antidepressants
Anxiolytics
Stress, animal
(**MCI-225** effect on extracellular noradrenaline in hypothalamus in stress: relevance to anxiolytic and/or antidepressant properties)

IT Brain
(hypothalamus; **MCI-225** effect on extracellular noradrenaline in hypothalamus in stress: relevance to anxiolytic and/or antidepressant properties)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** effect on extracellular noradrenaline in hypothalamus in stress: relevance to anxiolytic and/or antidepressant properties)

IT 51-41-2, Noradrenaline
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**MCI-225** effect on extracellular noradrenaline in hypothalamus in stress: relevance to anxiolytic and/or antidepressant properties)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD

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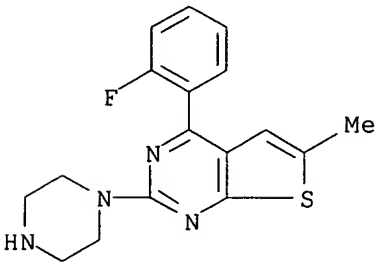
(23) Wu, Y; Brain Res 1997, V771, P347 HCAPLUS
(24) Yokoo, H; Brain Res 1991, V536, P305

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** effect on extracellular noradrenaline in hypothalamus in stress: relevance to anxiolytic and/or antidepressant properties)

RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L64 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:98327 HCAPLUS
DN 132:146650
ED Entered STN: 11 Feb 2000
TI Treating depression with a combination of a serotonin uptake inhibitor, a 5-HT1A presynaptic antagonist, and a 5-HT1A agonist
IN Depoortere, Henri
PA Sanofi-Synthelabo, Fr.
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA French
IC ICM A61K0031-40
ICS A61K0031-135; A61K0031-505; A61K0031-135; A61K0031-505
CC 1-11 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000006160	A1	20000210	WO 1999-FR1825	19990726
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2781671	A1	20000204	FR 1998-9603	19980728
	AU 9949167	A1	20000221	AU 1999-49167	19990726
PRAI	FR 1998-9603	A	19980728		
	WO 1999-FR1825	W	19990726		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000006160	ICM	A61K0031-40
	ICS	A61K0031-135; A61K0031-505; A61K0031-135; A61K0031-505
	IPCI	A61K0031-40 [ICM,7]; A61K0031-135 [ICS,7]; A61K0031-505 [ICS,7]; A61K0031-135 [ICS,7]; A61K0031-505 [ICS,7]
	IPCR	A61K0031-505 [I,A]; A61K0031-505 [I,C]; A61K0045-00 [I,C]; A61K0045-06 [I,A]
	ECLA	A61K031/505+M; A61K045/06
FR 2781671	IPCI	A61K0031-135 [ICM,7]; A61K0031-505 [ICS,7]; A61K0031-404 [ICS,7]; A61P0025-24 [ICS,7]; A61K0031-505 [ICI,7]; A61K0031-135 [ICI,7]; A61K0031-404 [ICI,7]
	IPCR	A61K0031-505 [I,A]; A61K0031-505 [I,C]; A61K0045-00 [I,C]; A61K0045-06 [I,A]
	ECLA	A61K031/505+M; A61K045/06
AU 9949167	IPCI	A61K0031-40 [ICM,7]; A61K0031-135 [ICS,7]; A61K0031-505 [ICS,7]
	IPCR	A61K0031-505 [I,A]; A61K0031-505 [I,C]; A61K0045-00 [I,C]; A61K0045-06 [I,A]

AB Pharmaceutical compns. are provided which contain a serotonin uptake inhibitor (e.g. fluoxetine), a 5-HT1A presynaptic antagonist (e.g. pindolol), and a 5-HT1A agonist (e.g. buspirone) as a combination product for simultaneous, sep., or prolonged use for treating various forms of depression.

ST depression fluoxetine pindolol buspirone combination; serotoninergic S1A presynaptic antagonist combination depression; S1A serotoninergic agonist combination depression

IT 5-HT agonists
5-HT antagonists
(5-HT1A; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Mental disorder**
(depression, major; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Mental disorder**
(depression, neurotic; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT Sleep
(disorder; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Mental disorder**

(manic bipolar disorder; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Mental disorder**
(**obsession-compulsion**; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT Drug delivery systems
(oral; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Anxiety**
(panic; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT **Mental disorder**
(phobia, social; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT Antidepressants
Antipsychotics
Anxiolytics
Cognition enhancers
Drug delivery systems
Drug interactions
(serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT Drug interactions
(synergistic; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT 50-67-9, Serotonin, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(reuptake inhibitors; serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

IT 13523-86-9, Pindolol 36505-84-7, Buspirone 54739-18-3, Fluvoxamine 54910-89-3, Fluoxetine 59729-33-8, Citalopram 61869-08-7, Paroxetine 71827-56-0, Clemeprol 79617-96-2, Sertraline 83366-66-9, Nefazodone 83455-48-5, Bromerguride 83928-76-1, Gepirone 87760-53-0, Tandospirone 90494-76-1, SR 57746 92623-85-3, Milnacipran 93413-69-5, Venlafaxine 95847-70-4, Ipsapirone 98206-10-1, Flesinoxan **99487-26-0**, **MCI 225** 102908-59-8, Binospirone 112922-55-1, Cericlamine 114298-18-9, Zalospirone 119356-77-3, Dapoxetine 127266-56-2, WY 50324 132449-45-7, E4414 132449-46-8, Lesopitron 132501-12-3, WY 48723 132873-35-9, LY 274600 133109-86-1, EMD 56551 135722-27-9, S 14671 138298-79-0, Alnespirone 141318-62-9, LY 293284 142348-14-9, Pyricapirone 144340-02-3, CP 119333 144980-77-8, BAYx 3702 145969-30-8, OPC 14523 146479-45-0, BMS 181101 146998-34-7, S 15535 149494-37-1, Ebalzotan 149654-41-1, U 92016A 150019-94-6, BMS 184111 150527-35-8, FG 5865 150710-80-8, HT 90B 156896-33-2, LY 301317 161178-10-5, YM 35992 161312-09-0 162408-66-4, GR 103691 162581-80-8, LY 297996 163521-12-8, EMD 68843 167933-07-5, Flibanserin 177975-08-5, EMD 77697 179756-58-2, F 11440 208516-87-4, NAD 299 214686-27-8, F 12439 221452-76-2, EF 7412 257614-79-2 257863-96-0, NS 2389 257863-98-2, EMD 80084 257864-13-4, AP 521 257864-15-6, AZ 16596 257864-30-5, DDR 203901 257864-31-6, DDR 205852 257864-33-8, DDR 208978 257864-35-0, DDR 211278 257864-36-1, DDR 212219 257864-37-2, FCE 23892 257864-38-3, LY 315535 257864-39-4, S 215521 257864-41-8, WAY 100802 257864-47-4, EMD 67478
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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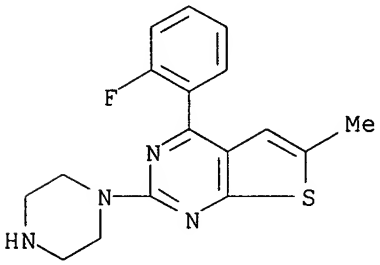
IT **99487-26-0, MCI 225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(serotonin uptake inhibitor-5-HT1A presynaptic antagonist-5-HT1A agonist combination for treatment of depression)
RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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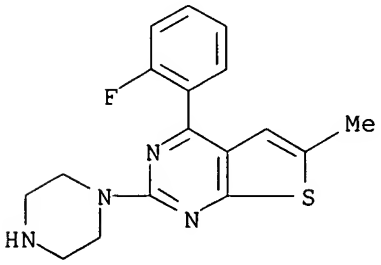
L64 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1999:807454 HCAPLUS
DN 132:44882
ED Entered STN: 22 Dec 1999
TI Effect of systemic administration of **MCI-225** on extracellular noradrenaline levels in the amygdala of stressed rats. Assessed by intracerebral microdialysis
AU Wu, Ying Liang; Yoshida, Masami; Emoto, Hiroyuki; Ishii, Hideo; Yamaoka, Toshihiko; Hasegawa, Masaichi; Tanaka, Masatoshi
CS Dep. Pharmacol., Kurume Univ. Sch. Med., Japan
SO Kurume Igakkai Zasshi (**1999**), 62(7-10), 192-196
CODEN: KIZAAL; ISSN: 0368-5810
PB Kurume Igakkai
DT Journal
LA Japanese

CC 1-11 (Pharmacology)
AB In the present study, we investigated the effect of systemic administration of **MCI-225**, a newly-developed selective noradrenaline reuptake inhibitor, on extracellular noradrenaline (NA) levels in the amygdala on stressed rats by utilizing intracerebral microdialysis. Footshock for 20 min significantly increased NA levels in the amygdala of both rats pretreated with vehicle and **MCI-225** at 10 mg/kg p.o. The stress-induced increases in extracellular NA levels were significantly higher in the rats treated with **MCI-225** (10 mg/kg) than those of rats pretreated with vehicle for the same period. These results suggest that **MCI-225** enhances the stress-induced increase in extracellular NA levels in the amygdala of rats by inhibiting NA reuptake.
ST antidepressant **MCI225** noradrenaline release amygdala stress
IT Brain
(amygdaloid body; effect of **MCI-225** on extracellular noradrenaline levels in amygdala of stressed rats)
IT Antidepressants
Stress, animal
(effect of **MCI-225** on extracellular noradrenaline levels in amygdala of stressed rats)
IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effect of **MCI-225** on extracellular noradrenaline levels in amygdala of stressed rats)
IT 51-41-2, Noradrenaline
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effect of **MCI-225** on extracellular noradrenaline levels in amygdala of stressed rats)
IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(effect of **MCI-225** on extracellular noradrenaline levels in amygdala of stressed rats)
RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:723694 HCAPLUS

DN 130:10644
ED Entered STN: 16 Nov 1998
TI Thienopyrimidines as anxiolytics
IN Eguchi, Junichi; Tahata, Reiko; Saito, Kenichi
PA Mitsubishi Chemical Industries Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K0031-505
ICS C07D0495-04
CC 1-11 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10298078	A2	19981110	JP 1997-115523	19970506
	WO 9850037	A1	19981112	WO 1998-JP1954	19980428

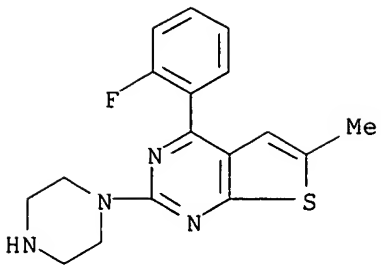
W: CA, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI JP 1997-115523 A 19970506

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 10298078	ICM	A61K0031-505
	ICS	C07D0495-04
	IPCI	A61K0031-505 [ICM,6]; C07D0495-04 [ICS,6]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]; C07D0495-00 [I,C]; C07D0495-04 [I,A]
WO 9850037	IPCI	A61K0031-505 [ICM,6]; C07D0495-04 [ICS,6]
	IPCR	A61K0031-519 [I,A]; A61K0031-519 [I,C]; C07D0495-00 [I,C]; C07D0495-04 [I,A]
	ECLA	A61K031/519; C07D495/04+333B+239B

OS MARPAT 130:10644
AB Thieno[2,3-d]pyrimidine derivs. and their salts and hydrates are effective for the prevention and treatment of neurosis and stress-related disorders. **4-(2-Fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine** was tested for anti-conflict activities with rats.
ST thienopyrimidine deriv anxiolytic
IT Stress, animal
(emotional, treatment of; thienopyrimidines as anxiolytics)
IT **Mental disorder**
(neurosis, treatment of; thienopyrimidines as anxiolytics)
IT Anxiolytics
(thienopyrimidines as anxiolytics)
IT **99487-25-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thienopyrimidines as anxiolytics)
IT **99487-25-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thienopyrimidines as anxiolytics)
RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



L64 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:2598 HCAPLUS
DN 128:43723
ED Entered STN: 05 Jan 1998
TI Pharmacological profile of the novel antidepressant **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno-[2,3-d]pyrimidine** monohydrate hydrochloride
AU Eguchi, Junichi; Inomata, Yuji; Yuasa, Takayuki; Egawa, Mitsuo; Saito, Kenichi
CS Pharmaceuticals Laboratory I, Yokohama Research Center, Mitsubishi Chemical Corporation, Yokohama, 227, Japan
SO Arzneimittel-Forschung (**1997**), 47(12), 1337-1347
CODEN: ARZNAD; ISSN: 0004-4172
PB Editio Cantor Verlag
DT Journal
LA English
CC 1-11 (Pharmacology)
AB This is a first report on the investigation of the antidepressant activity of **MCI-225** (**4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine** monohydrate hydrochloride, CAS **99487-26-0**) in comparison with maprotiline (CAS 10347-81-6), desipramine (CAS 58-28-6), imipramine (CAS 113-52-0) and trazodone (CAS 25332-39-2). **MCI-225** inhibited the synaptosomal uptake of noradrenaline (NA, Ki = 35.0 nmol/L), serotonin (5-HT, Ki = 491 nmol/L), and dopamine (Ki = 14800 nmol/L), although it did not inhibit MAO-A and MAO-B activities. **MCI-225** showed high affinity only for the 5-HT3 receptor (Ki = 81.0 nmol/L) among all receptors tested including M1, M2, α1, and H1 receptors. The inhibition of the von Bezold-Jarisch reflex by **MCI-225** (ID50 = 22.2 mg/kg, p.o.) suggests its antagonistic action on the 5-HT3 receptor. **MCI-225** dose-dependently reduced reserpine-induced hypothermia (0.3-10 mg/kg, p.o.) and potentiated yohimbine-induced lethality (3-100 mg/kg, p.o.) in mice. These effects of **MCI-225** were as potent as desipramine and more potent than maprotiline, imipramine and trazodone. **MCI-225** and desipramine did not change either 5-HTP-induced head movements or p-CA-induced hyperactivity in rats. In forced swimming tests in rats, the min. EDs of **MCI-225**, maprotiline, desipramine, and imipramine were I, 30, 10 and 30 mg/kg, p.o., resp., for 5-days administration. Only **MCI-225** had shown its full activity with this short term treatment. **MCI-225** (10 mg/kg, p.o.) decreased the REM sleep period without affecting slow-wave sleep or wakefulness in rats. Even at 100

mg/kg, p.o. **MCI-225** and trazodone did not inhibit oxotremorine-induced tremor, lacrimation or salivation in mice in contrast with imipramine. These results suggest that **MCI-225**, which selectively inhibits NA uptake and antagonizes the 5-HT3 receptor, has potential as a new type of potent antidepressant.

ST antidepressant **MCI225** serotonin receptor antagonist

IT 5-HT receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(5-HT3; pharmacol. profile of antidepressant **MCI-225**
)

IT Antidepressants
(pharmacol. profile of antidepressant **MCI-225**)

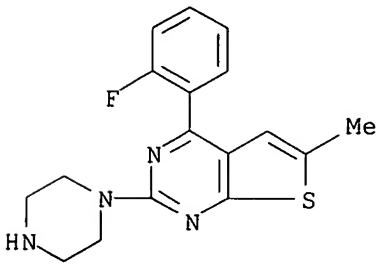
IT 50-47-5, Desipramine 50-49-7, Imipramine 10262-69-8, Maprotiline 19794-93-5, Trazodone **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacol. profile of antidepressant **MCI-225**)

IT 51-41-2, Noradrenaline 51-61-6, Dopamine, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(pharmacol. profile of antidepressant **MCI-225**)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmacol. profile of antidepressant **MCI-225**)

RN 99487-26-0 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:137486 HCAPLUS

DN 126:233473

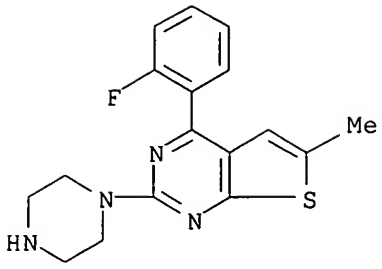
ED Entered STN: 01 Mar 1997

TI **MCI-225**, a novel thienopyrimidine analog, enhances attentional eye tracking in midpontine pretrigeminal preparation

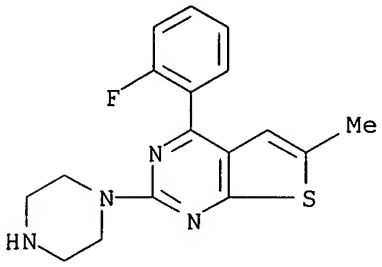
AU Eguchi, Junichi; Saitoh, Yoshito; Egawa, Mitsuo; Saito, Ken-Ichi; Kawamura, Hiroshi

CS Pharmaceuticals Laboratory I, Yokohama Research Center, Mitsubishi Chemical Corporation (MCC), Yokohama, 227, Japan

SO Pharmacology, Biochemistry and Behavior (1997), 56(2), 229-234
CODEN: PBBHAU; ISSN: 0091-3057
PB Elsevier
DT Journal
LA English
CC 1-11 (Pharmacology)
AB The effects of **MCI-225**, a novel psychoactive compound, and reference **drugs** on attention **behavior** were studied using visual stimulus induced vertical eye tracking movements in midpontine pretrigeminal (PTG) feline preparation Surgery was performed under ether anesthesia and subsequently switched to nitrous oxide-fluothane which was discontinued only during exptl. sessions. In addition xylocaine was locally injected. Vertical eye movements were monitored by electrooculogram (EOG) and a TV camera. To compare the effects of **drugs** on eye movement, nos. of spontaneous and tracking eye movements exceeding a present amplitude in EOG were counted before and during the visual stimulation, resp. **MCI-225** (1 and 3 mg/kg, i.v.) enhanced tracking movements dose-**dependently** without an increase in spontaneous eye movements. No or little change of the electrocorticogram (ECoG) was seen with 1mg/kg **MCI-225** and a slight increase in low voltage fast pattern was observed with 3mg/kg, i.v.. On the other hand, tacrine (0.3mg/kg, i.v.), physostigmine (0.03mg/kg, i.v.) and methylphenidate (0.3mg/kg, i.v.) enhanced both types of eye movement and induced ECoG arousal. Desipramine (3mg/kg, i.v.) slightly increased spontaneous eye movement without affecting tracking movements. Piracetam (100mg/kg, i.v.) decreased spontaneous eye movements only. These data clearly show that **MCI-225** enhances attention to a moving object and suggest that **MCI-225** could be useful in the treatment of attentional deficits and related cognitive dysfunctions in psychiatric disorders.
ST thienopyrimidine **MCI225** attention **behavior** eye movement
IT **Behavior**
Cognition enhancers
Eye
(**MCI-225** enhances attentional eye tracking in midpontine pretrigeminal preparation)
IT **Mental activity**
(attention; **MCI-225** enhances attentional eye tracking in midpontine pretrigeminal preparation)
IT **99487-25-9 99487-26-0, MCI 225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** enhances attentional eye tracking in midpontine pretrigeminal preparation)
IT **99487-25-9 99487-26-0, MCI 225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** enhances attentional eye tracking in midpontine pretrigeminal preparation)
RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-(9CI) (CA INDEX NAME)



RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:654483 HCAPLUS
DN 123:47804
ED Entered STN: 04 Jul 1995
TI Effects of **MCI-225** on memory and glucose utilization in basal forebrain-lesioned rats
AU Eguchi, Junichi; Iwai, Kunihisa; Yuasa, Takayuki; Egawa, Mitsuo; Komatsu, Teiko; Saito, Ken-Ichi
CS Pharmaceuticals Laboratory I, Yokohama Research Center, Yokohama, 227, Japan
SO Pharmacology, Biochemistry and Behavior (1995), 51(4), 935-9
CODEN: PBBHAU; ISSN: 0091-3057
PB Elsevier
DT Journal
LA English
CC 1-11 (Pharmacology)
AB The effects of **MCI-225** on amnesia, the cerebral glucose metabolism, and choline acetyltransferase (ChAT) activity in basal forebrain (BF)-lesioned rats were studied in comparison with those of tacrine. Bilateral BF lesions with ibotenic acid impaired the performance in passive avoidance (PA) tasks. Single administration of **MCI-225** (10 mg/kg, PO) after a 2-wk postoperative recovery period, increased the escape latencies in the PA task, but was not statistically significant. Repeated administration of **MCI-225** (0.3 and 1 mg/kg, PO for 6 days) significantly reversed the PA failure. The

BF-lesioned rat exhibited a marked decrease in the local cerebral glucose utilization (LCGU) in the frontal cortex, parietal cortex, and caudate-putamen. **MCI-225** (1 mg/kg, PO for 5 days) significantly ameliorated the reduction of the LCGU in the parietal cortex. **MCI-225** did not change the decrease in the cortical ChAT activity induced by the BF lesion. Repeated administration of tacrine revered the PA failure (0.3 mg/kg, PO) but failed to prevent the decrement in the LCGU and the ChAT activity. These results suggest that **MCI-225** could be effective in the treatment of senile dementia of the Alzheimer type, which is accompanied with both deficit in the BF-cortex cholinergic neuron and cerebral glucose hypometabolism.

ST **MCI225** memory amnesia glucose forebrain lesion; senile dementia Alzheimer **MCI225** memory amnesia

IT **Amnesia**
Memory, biological
(**MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

IT **Mental disorder**
(Alzheimer's disease, **MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

IT Brain, disease
(prosencephalon, lesion, **MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

IT **Mental disorder**
(senile psychosis, **MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

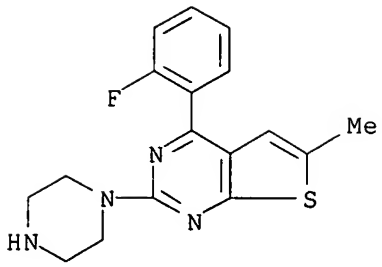
IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

IT 50-99-7, Glucose, biological studies 9012-78-6, Choline acetyltransferase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**MCI-225** vs. tacrine effect on memory, amnesia, and glucose utilization in basal forebrain lesion in relation to senile dementia treatment)

RN 99487-26-0 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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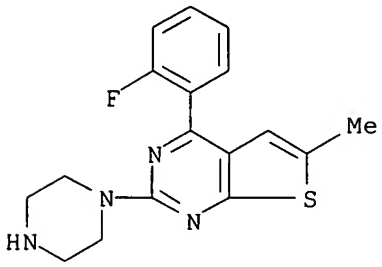
L64 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:449919 HCAPLUS
DN 121:49919
ED Entered STN: 06 Aug 1994
TI Effects of a novel compound **MCI-225** on impaired learning and memory in rats
AU Eguchi, Junichi; Yuasa, Takayuki; Egawa, Mitsuo; Tobe, Akihiro
CS Pharm. Lab. I, Mitsubishi Kasei Corp., Yokohama, 227, Japan
SO Pharmacology, Biochemistry and Behavior (1994), 48(2), 345-9
CODEN: PBBHAU; ISSN: 0091-3057
DT Journal
LA English
CC 1-11 (Pharmacology)
AB Effects on **MCI-225**, [**4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno[2,3-d]pyrimidine** monohydrate hydrochloride] on exptl. amnesia were studied in rats and compared with those of THA [9-amino-1,2,3,4-tetrahydroacridine]. In the Morris-type water maze task, **MCI-225** (1-10 mg/kg, PO) reduced the spatial learning impairment induced by scopolamine (0.5 mg/kg, IP). In a passive avoidance (PA) task, administration of **MCI-225** prior to training (1-30 mg/kg, PO) lessened the carbon dioxide (CO2)-induced amnesia in a dose-dependent manner. **MCI-225** (1-100 mg/kg) did not affect gross **behavior**. THA (0.1-3 mg/kg, PO) reduced scopolamine-induced learning deficits in the water maze task, but the effect was not significant. THA (0.3-3 mg/kg, PO) also ameliorated the CO2-induced amnesia, although slightly, in the PA task. THA (10 mg/kg, PO) increased locomotor activity and a higher dose of THA (30 mg/kg, PO) induced tremor, hypersalivation, and muscle relaxation. These results suggest that **MCI-225** lessens impairments in learning and memory without causing serious **behavioral** abnormalities.
ST **MCI225** learning memory improvement
IT **Learning**
Memory, biological
(**MCI-225** improvement of)
IT 321-64-2, 9-Amino-1,2,3,4-tetrahydroacridine **99487-26-0**, **MCI-225**
RL: BIOL (Biological study)
(learning and memory improvement by, side-effects in relation to)
IT **99487-26-0, MCI-225**
RL: BIOL (Biological study)

(learning and memory improvement by, side-effects in relation to)
RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:290120 HCAPLUS
DN 120:290120
ED Entered STN: 11 Jun 1994
TI Thienopyrimidines for treatment of brain function disorders
IN Ninomya, Kunihiro; Nitsuta, Kazumasa; Tobe, Akihiro; Egawa, Mitsuo; Kikumoto, Ryoji
PA Mitsubishi Chemical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K0031-505
ICA C07D0495-04
CC 1-11 (Pharmacology)
Section cross-reference(s): 28
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 06016557	A2	19940125	JP 1992-340658	19921221 <--
PRAI JP 1992-340658		19921221 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 06016557	ICM	A61K0031-505
	ICA	C07D0495-04
	IPCI	A61K0031-505 [ICM,5]; C07D0495-04 [ICA,5]

OS MARPAT 120:290120
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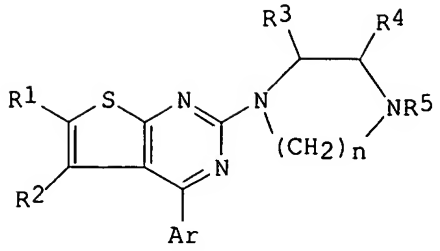


I

AB Thienopyrimidines I [Ar = (un)substituted Ph; R1, R2 = H, halo, C1-6 alkyl; R3, R4 = H, C1-6 alkyl; R5 = H, C1-6 alkyl, 4-(CH2)mCOC6H4X, 4-(CH2)mCH(OH)C6H4X, CONHR6; R6 = C1-6 alkyl; X = halo; m = 1-3; n = 2, 3] and their salts are useful for treatment of brain function disorders (e.g. depression and memory disorder). Refluxing 15.64 g 2-chloro-6-methyl-4-phenyl[2,3-d]thienopyrimidine with 62 g piperazine in EtOH for 1 h gave 17.17 g 6-methyl-4-phenyl-2-piperazinyl[2,3-d]thienopyrimidine, which was converted into the monohydrochloride. The product inhibited reserpine-induced body temperature decline at ED50 of 2.0 mg/kg p.o., vs. 14.5 mg/kg for amitriptyline.

ST antidepressant nootropic thienopyrimidine prepn; pyrimidine thieno prepn antidepressant nootropic

IT Antidepressants
Nootropics
(thienopyrimidines)

IT 456-04-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, by piperazinylthienopyrimidine derivative)

IT 3138-90-7, 1-Benzyl-3-methylpiperazine
RL: BIOL (Biological study)
(condensation of, with chlorothienopyrimidine derivative)

IT 110-85-0, Piperazine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with chlorothienopyrimidine derivative)

IT 99487-44-2
RL: BIOL (Biological study)
(condensation of, with piperazines)

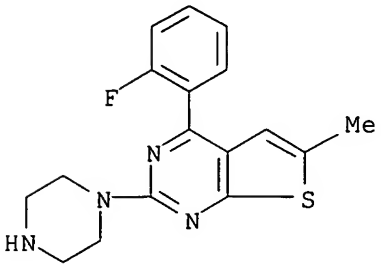
IT 99499-33-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and debenzylation of)

IT 99487-01-1P 99487-02-2P 99487-03-3P 99487-04-4P 99487-05-5P
99487-06-6P 99487-07-7P 99487-08-8P 99487-10-2P 99487-12-4P
99487-13-5P 99487-14-6P 99487-15-7P 99487-16-8P 99487-17-9P
99487-18-0P 99487-20-4P 99487-21-5P 99487-22-6P 99487-23-7P
99487-24-8P **99487-25-9P 99487-26-0P** 99487-28-2P
99487-29-3P 99487-30-6P 99487-31-7P 99487-32-8P 99487-33-9P
99487-34-0P 99487-36-2P 99487-37-3P 99487-38-4P 99487-39-5P
99487-40-8P 99487-41-9P 99487-42-0P 99487-43-1P 99499-19-1P
99499-34-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for treatment of brain function disorder)

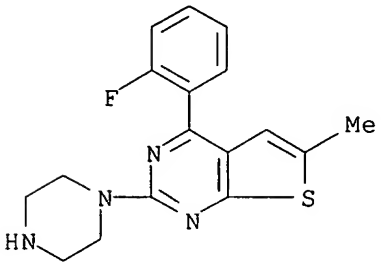
IT 99487-35-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)

IT **99487-25-9P 99487-26-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, for treatment of brain function disorder)
RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-(9CI) (CA INDEX NAME)



RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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L64 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:23421 HCAPLUS
DN 120:23421
ED Entered STN: 22 Jan 1994
TI Effect of a new psychoactive compound, **MCI-225**, on brain monoamine metabolism in rats
AU Oishi, Ryozo; Itoh, Yoshinori; Adachi, Naoto; Saeki, Kiyomi
CS Med. Sch., Okayama Univ., Okayama, 700, Japan
SO Japanese Journal of Pharmacology (**1993**), 63(2), 261-4
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
CC 1-11 (Pharmacology)
AB The effect of **MCI-225** on brain monoamine metabolism was examined in rats. **MCI-225** (30 mg/kg, p.o.) had no influence on noradrenaline (NA) levels, but inhibited the NA turnover in the hippocampus and hypothalamus. This compound also increased the 5-HIAA/5-hydroxytryptamine ratio in the cerebral cortex, hippocampus and striatum; and it enhanced the probenecid-induced 5-HIAA accumulation in the striatum. In the microdialysis study, **MCI-225**

markedly increased the NA output, but decreased the 3,4-dihydroxyphenylethyleneglycol output from the hypothalamus of urethane-anesthetized rats. Probably **MCI-225** enhances both noradrenergic and serotonergic function by inhibiting NA uptake and accelerating 5-HT turnover, resp.

ST psychotropic **MCI 225** brain monoamine metab

IT Hypothalamus, metabolism
(monoamines metabolism by, psychotropic **MCI 225** effect on)

IT Brain, metabolism
(cerebral cortex, monoamines metabolism by, psychotropic **MCI 225** effect on)

IT Brain, metabolism
(hippocampus, monoamines metabolism by, psychotropic **MCI 225** effect on)

IT Amines, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(mono-, metabolism of, by brain, psychotropic **MCI 225** effect on)

IT Brain, metabolism
(striatum, monoamines metabolism by, psychotropic **MCI 225** effect on)

IT 102-32-9, 3,4-Dihydroxyphenylacetic acid 28822-73-3, 3,4-Dihydroxyphenylethyleneglycol
RL: FORM (Formation, nonpreparative)
(formation of, as noradrenaline metabolite, in brain, psychotropic **MCI 225** effect on)

IT 54-16-0, 5-Hydroxyindoleacetic acid, biological studies
RL: FORM (Formation, nonpreparative)
(formation of, as serotonin metabolite, in brain, psychotropic **MCI 225** effect on)

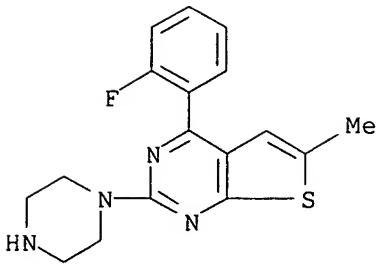
IT 50-67-9, 5-HT, biological studies 51-41-2, Noradrenaline 51-61-6, Dopamine, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(metabolism of, by brain, psychotropic **MCI 225** effect on)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(monoamine metabolism by brain response to)

IT **99487-26-0, MCI-225**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(monoamine metabolism by brain response to)

RN 99487-26-0 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



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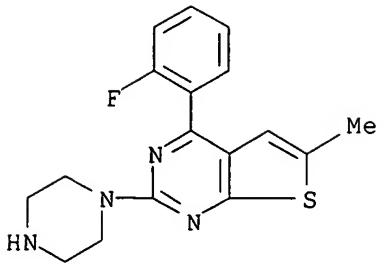
L64 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1991:526859 HCAPLUS
DN 115:126859
ED Entered STN: 05 Oct 1991
TI Effects of **MCI-225**, a new psychoactive compound, on experimental learning and memory related tasks
AU Egawa, Mitsuo; Eguchi, Junichi; Bessyo, Tomoko
CS Pharm. Lab., Mitsubishi Kasei Corp., Yokohama, Japan
SO Research and Development Review - Mitsubishi Kasei Corporation (1990), 5(1), 11-16
CODEN: MKCREV; ISSN: 0913-6045
DT Journal
LA Japanese
CC 1-11 (Pharmacology)
AB The effects of **MCI-225** (I) on the central nervous system were studied, especially with regard to learning and memory. In a water maze task using mice, I dose-dependently retrieved the special learning impairment induced by scopoamine (5-50 mg/kg). The CO2-induced passive avoidance response deficits in rats were inhibited dose dependently by I (3-100 mg/kg). In a learning task with an L-shaped maze using rats, lesions to the dorsal noradrenergic bundle with 6-hydroxy-dopamine produced the marked resistance to extension of a food-reward runway response. I (10 and 30 mg/kg) reduced resistance to extinction. These effects by I were better than those by piracetam. I caused no **behavioral** changes in the range of doses used. From these results, it was suggested that I had ameliorative effects on cognition in exptl. amnesia.
ST **MCI 225** learning memory
IT **Learning**
Memory, biological
(**MCI-225** effect on)
IT **99487-26-0, MCI 225**
RL: BIOL (Biological study)
(learning and memory response to)
IT **99487-26-0, MCI 225**
RL: BIOL (Biological study)
(learning and memory response to)
RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L64 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:459050 HCAPLUS
DN 107:59050
ED Entered STN: 21 Aug 1987
TI Preparation of thieno[2,3-d]pyrimidine derivatives as antidepressants and nootropic agents
IN Ninomiya, Kunihiro; Nitta, Kazumasa; Tobe, Akihiro; Egawa, Mitsuo; Kikumoto, Ryoji
PA Mitsubishi Chemical Industries Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A61K0031-505
ICS A61K0031-505
ICA C07D0495-04
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

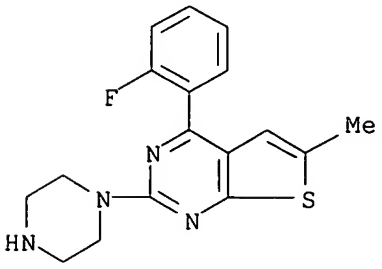
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62000427	A2	19870106	JP 1985-141347	19850627
	JP 05048208	B4	19930720		
PRAI	JP 1985-141347		19850627		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 62000427	ICM	A61K0031-505
	ICS	A61K0031-505
	ICA	C07D0495-04
	IPCI	A61K0031-505 [ICM,4]; A61K0031-505 [ICS,4]; C07D0495-04 [ICA,4]
	IPCR	A61K0031-505 [I,A]; A61K0031-505 [I,C]; C07D0495-00 [I,C]; C07D0495-04 [I,A]

GI For diagram(s), see printed CA Issue.
AB The title compds. [I; R1, R2 = H, halo, alkyl; R1R2 = C5,6 alkylene; R3, R4 = H, alkyl; R5 = alkyl, alkylcarbamoyl, p-XC6H4CO(CH2)m, p-XC6H4CH(OH)(CH2)m, where m = 1-3, X = halo; Ar = (substituted) ph, 2- or 3-thienyl; n = 2,3] and their salts, useful as antidepressants and agents for the improvement of brain functions, were prepared Anhydrous piperazine in EtOH was added dropwise to a solution of 2-chloro-6-methyl-4-phenyl-thieno[2,3-d]pyrimidine under reflux in 1 h and the resulting mixture was refluxed for 1 h to give 6-methyl-4-phenyl-2-piperazinyl-thieno[2,3-

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

L64 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:19606 HCAPLUS
DN 104:19606
ED Entered STN: 24 Jan 1986
TI Thieno[2,3-d]pyrimidine derivatives and their salts
IN Ninomiya, Kunihiro; Nitta, Issei; Tobe, Akihiro; Egawa, Mitsuo; Kikumoto, Ryoji
PA Mitsubishi Chemical Industries Co., Ltd. , Japan
SO Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C07D0495-04
ICS A61K0031-505
ICA A61K0031-38
ICI C07D0495-04, C07D0333-00, C07D0239-00
CC 28-17 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 150469	A1	19850807	EP 1984-116052	19841221
	EP 150469	B1	19880615		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	JP 60146891	A2	19850802	JP 1984-479	19840105
	JP 03067071	B4	19911021		
	DK 8406171	A	19850706	DK 1984-6171	19841220
	DK 165744	B	19930111		
	DK 165744	C	19930607		
	AT 35137	E	19880715	AT 1984-116052	19841221
	US 4695568	A	19870922	US 1984-685768	19841224
	CA 1224782	A1	19870728	CA 1984-471183	19841228
	HU 37435	A2	19851228	HU 1985-13	19850103
	HU 191161	B	19870128		
PRAI	JP 1984-479	A	19840105		
	EP 1984-116052	A	19841221		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES

d]pyrimidine. I as antidepressants were 3.6-54 times as effective as amitriptyline in reserpine-induced mice. I were more effective than amitriptyline in preventing body temperature drop (induced by reserpine) in mice, with ED50 of 0.27-4.0 mg/kg, p.o.

ST thienopyrimidine prepn antidepressant nootropic; pyrimidine thieno prepn antidepressant nootropic

IT Antidepressants
(thienopyrimidine derivs.)

IT **Amnesia**
(treatment of, by thienopyrimidine derivs.)

IT Psychotropics
(psychoanaleptics, thienopyrimidine derivs.)

IT 110-85-0, Piperazine, reactions 3138-90-7, 1-Benzyl-3-methylpiperazine
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination by, of chlorothienopyrimidine derivative)

IT 99487-44-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(amination of, by piperazine derivs.)

IT 99487-35-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrogenolysis of)

IT 99499-33-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenolysis of)

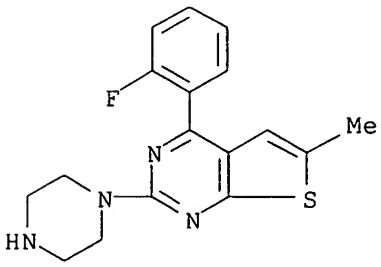
IT 99487-01-1P 99487-03-3P 99487-05-5P 99487-07-7P 99487-09-9P
99487-13-5P 99487-15-7P 99487-16-8P 99487-21-5P 99487-23-7P
99487-25-9P 99487-27-1P 99487-29-3P 99487-31-7P
99487-33-9P 99487-37-3P 99487-39-5P 99487-41-9P 99487-42-0P
99487-43-1P 99499-19-1P 99499-34-0P 109348-26-7P 109348-27-8P
109348-28-9P 109348-29-0P 109348-30-3P 109348-31-4P 109348-32-5P
109348-33-6P 109348-34-7P 109348-35-8P 109348-36-9P 109348-37-0P
109348-38-1P 109348-39-2P 109348-40-5P 109348-41-6P
109348-42-7P 109348-43-8P 109348-44-9P 109348-45-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antidepressant and for improvement of brain function)

IT 456-04-2, 4-Fluorophenacyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(N-alkylation by, of piperazinylthienopyrimidine derivative)

IT **99487-25-9P 109348-38-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antidepressant and for improvement of brain function)

RN 99487-25-9 HCAPLUS

CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 109348-38-1 HCAPLUS

EP 150469	ICM	C07D0495-04
	ICS	A61K0031-505
	ICA	A61K0031-38
	ICI	C07D0495-04, C07D0333-00, C07D0239-00
	IPCI	C07D0495-04 [ICM,4]; A61K0031-505 [ICS,4]; A61K0031-38 [ICA,4]; C07D0495-04 [ICI,4]; C07D0333-00 [ICI,4]; C07D0239-00 [ICI,4]
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JP 60146891	IPCI	C07D0495-04 [ICM,4]; A61K0031-505 [ICA,4]
DK 8406171	IPCI	C07D [ICM,4]
AT 35137	IPCI	C07D0495-04 [ICM,4]; A61K0031-505 [ICS,4]; A61K0031-38 [ICA,4]; C07D0495-04 [ICI,4]; C07D0333-00 [ICI,4]; C07D0239-00 [ICI,4]
	IPCR	A61K0031-38 [N,A]; A61K0031-38 [N,C]; A61K0031-505 [I,A]; A61K0031-505 [I,C]; C07D0495-00 [I,C]; C07D0495-04 [I,A]
US 4695568	IPCI	A61K0031-38 [ICM,4]; C07D0239-00 [ICS,4]
	IPCR	C07D0495-00 [I,C]; C07D0495-04 [I,A]
	NCL	514/252.160; 514/267.000; 544/250.000; 544/278.000
CA 1224782	IPCI	C07D0495-04 [ICM,4]
	IPCR	C07D0495-00 [I,C]; C07D0495-04 [I,A]
HU 37435	IPCI	C07D0495-04 [ICM,4]

OS CASREACT 104:19606; MARPAT 104:19606

GI For diagram(s), see printed CA Issue.

AB Piperazinyl- and homopiperazinylthieno[2,3-d]pyrimidines I [R = (un)substituted Ph, thienyl; R1, R2 = H, alkyl, halo; R1R2 = alkylene; R3, R4 = H, alkyl; R5 = H, alkyl, alkylcarbamoyl, 4-R6C6H4Z(CH2)m; R6 = halo; Z = CO, CHOH; n = 1, 2; m = 1-3] were prepared Thus, 15.64 g 2-chloro-6-methyl-4-phenylthieno[2,3-d]pyrimidine in CHCl3 was added dropwise to 62 g piperazine in refluxing EtOH and the mixture refluxed 1 h to give 17.17 g I (R = Ph, R1 = Me, R2-R5 = H, n = 2) (II). I are antidepressants. In mice II inhibits reserpine-induced hypothermia with an ED50 of 2.0 mg/kg orally compared to 14.5 mg/kg for amitriptyline.

ST piperazinylthienopyrimidine prepn antidepressant; thienopyrimidine piperazinyl; chlorothienopyrimidine aminolysis piperazine

IT Aminolysis
(of chlorothienopyrimidines by piperazines)

IT Antidepressants
(piperazinylthienopyrimidines)

IT **Learning**
(piperazinylthienopyrimidines effect on)

IT **Memory, biological**
(short-term, piperazinylthienopyrimidines effect on)

IT 56844-18-9 77139-83-4 99487-45-3 99487-46-4 99487-47-5
99499-20-4 99499-21-5 99499-22-6 99499-23-7 99499-24-8
99499-25-9 99499-26-0 99499-27-1 99499-28-2 99499-29-3
99499-30-6 99499-31-7 99499-32-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminolysis of, by piperazine)

IT 99487-44-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminolysis of, by piperazines and homopiperazine)

IT 109-07-9 505-66-8 3138-90-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with chlorothienopyrimidine derivative)

IT 110-85-0, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with chlorothienopyrimidines)

IT 456-04-2
RL: RCT (Reactant); RACT (Reactant or reagent)

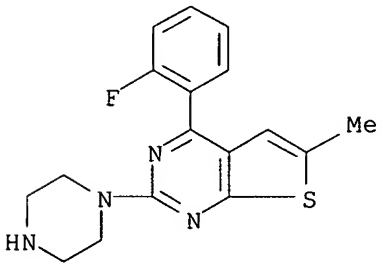
(condensation of, with piperazinylthienopyrimidine derivative)

IT 99499-33-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and debenzylation of)

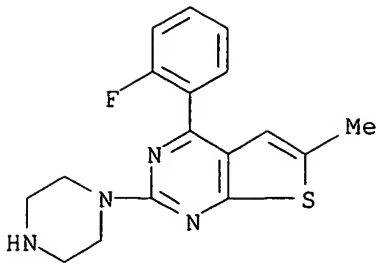
IT 99487-01-1P 99487-02-2P 99487-03-3P 99487-04-4P 99487-05-5P
99487-06-6P 99487-07-7P 99487-08-8P 99487-09-9P 99487-10-2P
99487-11-3P 99487-12-4P 99487-13-5P 99487-14-6P 99487-15-7P
99487-16-8P 99487-17-9P 99487-18-0P 99487-19-1P 99487-20-4P
99487-21-5P 99487-22-6P 99487-23-7P 99487-24-8P **99487-25-9P**
99487-26-0P 99487-27-1P 99487-28-2P 99487-29-3P
99487-30-6P 99487-31-7P 99487-32-8P 99487-33-9P 99487-34-0P
99487-35-1P 99487-36-2P 99487-37-3P 99487-38-4P 99487-39-5P
99487-40-8P 99487-41-9P 99487-42-0P 99487-43-1P 99499-19-1P
99499-34-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as antidepressant)

IT **99487-25-9P 99487-26-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as antidepressant)

RN 99487-25-9 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 99487-26-0 HCAPLUS
CN Thieno[2,3-d]pyrimidine, 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

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L90 ANSWER 1 OF 5 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN **2004-561744** [54] WPIX
DNC C2004-205271
TI Use of heterocyclic derivatives (e.g. **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-d)pyrimidine**) as noradrenaline reuptake inhibitors and 5-hyroxy tryptamine-3 receptor antagonists to treat nausea, vomiting and/or retching.
DC B02
IN LANDAU, S B; MILLER, C L; THOR, K B
PA (DYNO-N) DYNOGEN PHARM INC
CYC 109
PI WO 2004062624 A2 20040729 (200454)* EN 66 A61K000-00

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OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG
US UZ VC VN YU ZA ZM ZW

US 2004147510 A1 20040729 (200454) A61K031-551
US 2004254171 A1 20041216 (200482) A61K031-551
US 2004254172 A1 20041216 (200482) A61K031-551
AU 2004204827 A1 20040729 (200525) A61K031-551
EP 1567163 A2 20050831 (200561) EN A61K031-551
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MC MK NL PT RO SE SI SK TR
BR 2004006748 A 20051220 (200604) A61K031-551

ADT WO 2004062624 A2 WO 2004-US809 20040113; US 2004147510 A1 Provisional US 2003-440076P 20030113, Provisional US 2003-492478P 20030804, US 2004-757981 20040113; US 2004254171 A1 Provisional US 2003-440076P 20030113, Provisional US 2003-492478P 20030804, Cont of US 2004-757981 20040113, US 2004-846978 20040514; US 2004254172 A1 Provisional US 2003-440076P 20030113, Provisional US 2003-492478P 20030804, Cont of US 2004-757981 20040113, US 2004-846979 20040514; AU 2004204827 A1 AU 2004-204827 20040113; EP 1567163 A2 EP 2004-701830 20040113, WO 2004-US809 20040113; BR 2004006748 A BR 2004-6748 20040113, WO 2004-US809 20040113

FDT AU 2004204827 A1 Based on WO 2004062624; EP 1567163 A2 Based on WO 2004062624; BR 2004006748 A Based on WO 2004062624

PRAI US 2003-492478P 20030804; US 2003-440076P 20030113;
US 2004-757981 20040113; US 2004-846978 20040514;
US 2004-846979 20040514

IC ICM A61K000-00; A61K031-551
ICS A61K031-135; A61K031-519; A61K031-535

AB WO2004062624 A UPAB: 20040823

NOVELTY - Treatment of nausea, vomiting and/or retching comprises administration of a heterocyclic compounds (I) or their salts.

DETAILED DESCRIPTION - Treatment of nausea, vomiting and/or retching comprises administration of a heterocyclic compounds of formula (I) or their salts.

Either R1, R2 = H, halo or 1-6C alkyl; or
CR1R2 = 5-6C cycloalkylene;
R3, R4 = H or 1-6C alkyl;
R5 = H, 1-6C alkyl, benzene derivatives of formulae (1 and 2) or C(O)-NH-R6;
m = 1-3;
X = halo;
R6 = 1-6C alkyl;
Ar = optionally substituted phenyl, 2-thienyl or 3-thienyl; and
n = 2-3.

INDEPENDENT CLAIMS are also included for:

(1) a composition (II) comprising a 5-hyroxy tryptamine-3 (5-HT3) receptor antagonist (A) and a noradrenaline reuptake inhibitor (B); and

(2) a method for processing a claim under a health insurance policy submitted by a claimant seeking reimbursement for costs associated with treatment of nausea, vomiting and/or retching, where the treatment comprises coadministration of a first amount of (A) and a second amount of (B) (where (A) or (B) are administered in therapeutically effective amounts; or the first and second amounts together comprise a therapeutically effective amount), comprises reviewing the claim; determining whether the treatment is reimbursable under the insurance policy; and processing the claim to provide partial or complete reimbursement of the costs.

ACTIVITY - Antiemetic.

MECHANISM OF ACTION - Noradrenaline reuptake inhibitor; 5-hyroxy tryptamine-3 receptor antagonist.

USE - Compounds (I) are useful in the treatment of nausea, vomiting and/or retching caused by an anesthetic, radiation, a cancer chemotherapeutic agent, a toxic agent, an odor, a medicine (an analgesic, an antibiotic, an antifungal or a serotonin reuptake inhibitor), pregnancy, motion, conditions associated with vertigo, headache or a malady of the gastrointestinal tract in humans (claimed). The ability of compounds (I) to reduce retching and vomiting was assessed in a model of cytotoxin-induced emesis in a ferret. The results showed that **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-d)pyrimidine** at concentrations of 1, 10 or 30 mg/kg caused dose-dependent reduction in the retches and vomits induced by cisplatin.

Dwg.0/6

FS CPI

FA AB; GI; DCN

MC CPI: B06-A01; B06-D01; B06-D03; B06-D04; B06-D05; B06-D06; B06-D13; B06-D15; B06-D18; B06-F03; B06-F05; B07-B01; B07-E03; B08-C01; B10-B02F; B10-B04B; B14-E05

TECH UPTX: 20040823

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method: Treatment of nausea, vomiting and/or retching comprises the administration of a first amount of (A) and a second amount of (B) (where (A) or (B) are administered in therapeutically effective amounts; or the first and second amounts together comprise a therapeutically effective amount); or a noradrenaline reuptake inhibitor (characterized by the substantial absence of anticholinergic effects). Preferred Components: (A) is indisetron, YM-114 ((R)-2,3-dihydro-1-((4,5,6,7-tetrahydro-1H-benzimidazol-5-yl)carbonyl)-1H-indole), granisetron, talipexole, azasetron, bemesetron, tropisetron, ramosetron, ondansetron, palonosetron, lerisetron, alosetron, N-3389, zacopride, cilansetron, E-3620 ((3(S)-endo)-4-amino-5-chloro-N-(8-methyl-8-azabicyclo(3.2.1-)oct-3-yl-2((1-methyl-2-butynyl)oxy)benzamide), lintopride, KAE-393, itasetron, zatosetron, dolasetron, (+/-)-zacopride, (+/-)-renzapride, (-)-YM-060, DAU-6236, BIMU-8 or GK-128(2-(2-methylimidazol-1-yl)methyl)-benzo(f)thiochromen-1-one monohydrochloride hemihydrate) (preferably indisetron, granisetron, azasetron, bemesetron, tropisetron, ramosetron, ondansetron, palonosetron, lerisetron, alosetron, cilansetron, itasetron, zatosetron or dolasetron). (B) is venlafaxine, duloxetine, buproprion, milnacipran, reboxetine, lefepramine, desipramine, nortriptyline, tomoxetine, maprotiline, oxaprotiline, levoprotiline, viloxazine or atomoxetine (preferably reboxetine, lefepramine, desipramine, nortriptyline, tomoxetine, maprotiline, oxaprotiline, levoprotiline, viloxazine or atomoxetine). (II) further comprises a carrier.

ABEX UPTX: 20040823

SPECIFIC COMPOUNDS - The use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-d)pyrimidine** is specifically claimed as (I).

ADMINISTRATION - Administration of (I) is 0.001-1000 (preferably 0.1-50) mg/day, orally, transdermally, sublingually, buccally, parenterally, rectally, intranasally, intrapulmonarily or intrabronchially.

DEFINITIONS - Preferred Definitions:
R1 = 1-6C alkyl (preferably methyl) or halo;
Ar = a phenyl optionally substituted with a halo (preferably an

unsubstituted phenyl);
R2 = H or 1-6C alkyl; and
n = 2.

L90 ANSWER 2 OF 5 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN **2004-257344** [24] WPIX
DNC C2004-100579
TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno(2,3-D)pyrimidine** as serotonin reuptake blockers for the treatment of e.g. fibromyalgia, obesity and weight gain.
DC B02
IN **CAVALLA, D; GRISTWOOD, R W**
PA (ARAC-N) **ARACHNOVA THERAPEUTICS LTD**
CYC 106
PI WO 2004019948 A1 20040311 (200424)* EN 13 A61K031-519
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
AU 2003259373 A1 20040319 (200462) A61K031-519
EP 1539172 A1 20050615 (200539) EN A61K031-519
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
BR 2003013836 A 20050621 (200542) A61K031-519
JP 2006500427 W 20060105 (200603) 11 A61K031-519
CN 1678322 A 20051005 (200606) A61K031-519
ADT WO 2004019948 A1 WO 2003-GB3720 20030828; AU 2003259373 A1 AU 2003-259373 20030828; EP 1539172 A1 EP 2003-791032 20030828, WO 2003-GB3720 20030828; BR 2003013836 A BR 2003-13836 20030828, WO 2003-GB3720 20030828; JP 2006500427 W WO 2003-GB3720 20030828, JP 2004-569724 20030828; CN 1678322 A CN 2003-820617 20030828
FDT AU 2003259373 A1 Based on WO 2004019948; EP 1539172 A1 Based on WO 2004019948; BR 2003013836 A Based on WO 2004019948; JP 2006500427 W Based on WO 2004019948
PRAI GB 2003-16115 20030709; GB 2002-20064 20020829
IC ICM A61K031-519
ICS **A61P001-00**; **A61P001-08**; **A61P001-14**; **A61P003-00**; **A61P003-04**; A61P013-00; **A61P015-00**; **A61P025-00**; **A61P025-04**; **A61P025-06**; **A61P025-08**; **A61P025-16**; **A61P025-18**; **A61P025-22**; **A61P025-30**; **A61P025-34**; **A61P031-00**; **A61P031-14**; **A61P035-00**; **A61P039-00**; **A61P043-00**; C07D495-00; C07D495-04
AB WO2004019948 A UPAB: 20040408
NOVELTY - Use of 4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-D)pyrimidine (I) or its salt for the manufacture of a medicament.
ACTIVITY - Anorectic; Antiaddictive; Gynecological; Eating-Disorders-Gen.; Antiparkinsonian; Antimigraine; Cerebroprotective; Vasotropic; Antiemetic; Neuroleptic; Tranquilizer; Muscular-Gen.; Immunomodulator; Antismoking.
MECHANISM OF ACTION - Serotonin reuptake blocker; Noradrenergic reuptake blocker; 5-hydroxy tryptamine-3 (5HT-3) receptor blocker.
Test details are described but no results given.
USE - (I) is useful for the treatment of fibromyalgia, obesity,

weight gain, substance abuse, drug addiction, premenstrual syndrome, eating disorders, migraine, Parkinson's disease, stroke, nausea, vomiting, chemotherapy or radioactivity-induced emesis, schizophrenia, obsessive-compulsive disorder, fatigue and also for the encouragement of smoking cessation (claimed).

ADVANTAGE - (I) has both serotonin and noradrenergic reuptake blocking properties, but also has important 5HT-3 receptor blocking activity, which would be expected to modify the pharmacological actions of (I) in vivo in a non-predictable manner.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B06-F03; B14-C01; B14-E05; B14-E11; B14-E12; B14-F02C; B14-F02D1; B14-J01A3; B14-J01B3; B14-J01B4; B14-J02D; B14-J03; B14-J04; B14-J05; B14-M01B; B14-M01C; B14-N14; B14-N16

TECH UPTX: 20040408

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Components: The salt is the hydrochloride monohydrate.

ABEX UPTX: 20040408

ADMINISTRATION - Administration of (I) is 0.1 mg - 5 g, orally, sublingually, buccally, transdermally, intramuscularly, intranasally, rectally, parenterally, subcutaneously, pulmonarly or topically.

L90 ANSWER 3 OF 5 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2004-156441 [15] WPIX

CR 2003-156742 [15]

DNC C2004-062118

TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno(2,3-D)pyrimidine** or its salt in the manufacture of medicament for treating functional bowel disorder.

DC B02

IN **CAVALLA, D; GRISTWOOD, R W; GRISTWOOD, W;** BARDSLEY, H J

PA (BARD-I) BARDSLEY H J; (CAVA-I) CAVALLA D; (GRIS-I) GRISTWOOD R W; (ARAC-N) **ARACHNOVA THERAPEUTICS LTD**

CYC 104

PI WO 2004004734 A1 20040115 (200415)* EN 9 A61K031-519
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
US 2004048874 A1 20040311 (200419) A61K031-519
AU 2003255712 A1 20040123 (200459) A61K031-519
EP 1519728 A1 20050406 (200523) EN A61K031-519
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
BR 2003012511 A 20050412 (200526) A61K031-519
KR 2005016968 A 20050221 (200544) A61K031-519
US 2005239792 A1 20051027 (200571) A61K031-519
JP 2005533829 W 20051110 (200574) 8 A61K031-519
CN 1668307 A 20050914 (200607) A61K031-519

ADT WO 2004004734 A1 WO 2003-GB2974 20030709; US 2004048874 A1 CIP of WO 2002-GB2388 20020521, US 2003-617847 20030710; AU 2003255712 A1 AU 2003-255712 20030709; EP 1519728 A1 EP 2003-762820 20030709, WO 2003-GB2974 20030709; BR 2003012511 A BR 2003-12511 20030709, WO

2003-GB2974 20030709; KR 2005016968 A KR 2005-700141 20050104; US 2005239792 A1 WO 2003-GB2974 20030709, US 2004-519594 20041228; JP 2005533829 W WO 2003-GB2974 20030709, JP 2004-519012 20030709; CN 1668307 A CN 2003-816290 20030709

FDT AU 2003255712 A1 Based on WO 2004004734; EP 1519728 A1 Based on WO 2004004734; BR 2003012511 A Based on WO 2004004734; JP 2005533829 W Based on WO 2004004734

PRAI GB 2003-4648 20030228; GB 2002-16027 20020710; GB 2001-12494 20010522

IC ICM A61K031-519
ICS A61P001-00; A61P001-10; A61P001-12; C07D498-02

AB WO2004004734 A UPAB: 20060130
NOVELTY - In the manufacture of a medicament for the treatment of a functional bowel disorder, **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-D)pyrimidine** (I) or its salt is used.

ACTIVITY - Antiinflammatory; Antidiarrheic; Gastrointestinal-Gen.; Laxative.

The efficacy of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-D)pyrimidine** hydrochloride monohydrate (Ia) to treat functional bowel disease was evaluated in male Sprague-Dawley rats in terms of its ability to inhibit reflex depressor responses to colorectal distension. The left carotid artery and the left jugular vein were cannulated. A long latex balloon was inserted intrarectally and then connected via a double lumen cannula to a pressure transducer and also to a saline-filled syringe for inflation/deflation of the balloon. The balloon was rapidly inflated with saline and changes in blood pressure were recorded. (Ia) (3 mg/kg) (test) was administered intravenously into left jugular vein before commencement of final distension response curve. Fall in arterial blood pressure (mm of Hg) evoked by distension of the balloon at 0.5/1/1.5/2/2.5 ml of balloon volume: before adding (Ia) were 2.7/12.4/24/36.3/43.4; and after administration of (Ia) were 2.2/6.3/10.6/15.3/24.6 respectively. The results showed that (Ia) inhibited the distension-induced falls in the blood pressure.

MECHANISM OF ACTION - 5-Hydroxytryptamine-3 receptor antagonist; Serotonin and norandrenergic reuptake inhibitor.

USE - For the treatment of functional bowel disorder (e.g. irritable bowel syndrome, and alternating constipation/diarrhea-predominant irritable bowel syndrome) in female patient (claimed).

ADVANTAGE - The functional combination of serotonin and noradrenergic reuptake blockade and 5-HT-3 receptor blockade of (I) provides excellent therapy for irritable bowel syndrome. (I) also lowers incidences of the side effects e.g. nausea, vomiting or induction of sexual dysfunction associated with known selective serotonin reuptake inhibitors.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B06-F03; B14-E02; B14-E09; B14-E10C; B14-J02D; B14-J04

ABEX UPTX: 20040302
ADMINISTRATION - Dosage of (I) is 0.1 mg/day - 1 g/day. Administration is by oral, sublingual, buccal, transdermal, intramuscular, intranasal, rectal, parenteral, subcutaneous, pulmonary, or topical route.

EXAMPLE - None given.

L90 ANSWER 4 OF 5 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2003-679474 [64] WPIX

DNC C2003-185613
TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno(2,3-D)pyrimidine** for the treatment of urinary incontinence.
DC B02
IN **CAVALLA, D; GRISTWOOD, R W**
PA (ARAC-N) **ARACHNOVA THERAPEUTICS LTD**; (CAVA-I) CAVALLA D; (GRIS-I) GRISTWOOD R W
CYC 103
PI WO 2003063873 A1 20030807 (200364)* EN 5 A61K031-519
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
AU 2003205836 A1 20030902 (200422) A61K031-519
EP 1469853 A1 20041027 (200471) EN A61K031-519
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
KR 2004081479 A 20040921 (200508) A61K031-519
BR 2003007369 A 20041214 (200510) A61K031-519
JP 2005516977 W 20050609 (200538) 8 A61K031-519
CN 1625402 A 20050608 (200562) A61K031-519
US 2005222162 A1 20051006 (200566) A61K031-519
ADT WO 2003063873 A1 WO 2003-GB374 20030129; AU 2003205836 A1 AU 2003-205836 20030129; EP 1469853 A1 EP 2003-702713 20030129, WO 2003-GB374 20030129; KR 2004081479 A KR 2004-711877 20040730; BR 2003007369 A BR 2003-7369 20030129, WO 2003-GB374 20030129; JP 2005516977 W JP 2003-563563 20030129, WO 2003-GB374 20030129; CN 1625402 A CN 2003-803046 20030129; US 2005222162 A1 WO 2003-GB374 20030129, US 2004-502827 20040727
FDT AU 2003205836 A1 Based on WO 2003063873; EP 1469853 A1 Based on WO 2003063873; BR 2003007369 A Based on WO 2003063873; JP 2005516977 W Based on WO 2003063873
PRAI GB 2002-2265 20020131
IC ICM A61K031-519
ICS A61K031-505; A61P013-02; A61P013-10; A61P013-100; C07D495-04
AB WO2003063873 A UPAB: 20031006
NOVELTY - In the manufacture of a medicament for the treatment of urinary incontinence, **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno(2,3-D)pyrimidine** (I) or its salt is used.

ACTIVITY - Uropathic; Antidepressant; Endocrine-Gen.; Antiemetic.

The uropathic activity of (I) was evaluated in female Sprague-Dawley rats in terms of its ability to increase the tone of urethra or internal sphincter. In the anaesthetized rats, the bladder was exposed through a midline incision into the abdomen and intravesicular pressure was recorded via a catheter inserted into the bladder. A second catheter was inserted into the bladder to allow infusion of saline using a syringe pump. A third catheter was inserted into the bladder and wedged into position in the neck of the bladder with catheter extending into the urethra. Electromyographic (EMG) recordings were made of urethral striated muscle activity by inserting two fine copper electrodes either side of the urethral opening. After recording stable bladder and urethral pressures, the bladder was inflated by direct infusion of saline into the bladder at a rate of 0.046 ml/min. During and after saline infusion, simultaneous recordings were made of urethral perfusion pressure and of external

sphincter EMG activity. In one group of animals, prior to intravesicular infusion of saline a single bolus dose of (I) (3 mg/kg intravenous). In control group of animals a bolus dose of vehicle was administered. The changes in urethral perfusion pressure and external sphincter EMG activity during and after infusion were analyzed. The urethral pressure (mm Hg) increased from 13 plus or minus 1 to 23 plus or minus 2 in rats treated with (I) and from 14 plus or minus 1 to 18 plus or minus 2 in control rats. Larger fall in external sphincter activity was seen in rats treated with (I). The results showed that (I) increased the urethral pressure by 77% as compared to that of 29% in control.

MECHANISM OF ACTION - Noradrenergic reuptake inhibitor; Serotonin reuptake inhibitor; 5-Hydroxytryptamine-3 (5HT-3) blocker.

USE - In a medicament for treatment of urinary incontinence (e.g. stress urinary incontinence) (claimed).

ADVANTAGE - (I) produces lower incidence of side effect (e.g. nausea, vomiting or induction of sexual dysfunction) as compared to other known serotonin reuptake inhibitor.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B06-F03; B14-N07D
TECH UPTX: 20031006

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Salt: The salt is monohydrate hydrochloride.

ABEX UPTX: 20031006

ADMINISTRATION - Dosage is 0.1-1000 mg/day and is administered by oral, sublingual, buccal, transdermal, intramuscular, intranasal, rectal, parenteral, subcutaneous, pulmonary or topical route.

EXAMPLE - None given.

L90 ANSWER 5 OF 5 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN 2003-156742 [15] WPIX
CR 2004-156441 [15]
DNC C2003-040667
TI Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl) thieno(2,3-D)pyrimidine** in manufacture of medicament for treatment of pain, e.g. nociceptive pain or neuropathic pain.
DC B02
IN BARDSLEY, H J; **CAVALLA, D**; **GRISTWOOD, R W**; BARDSLEY, J H; **GRISTWOOD, W**
PA (ARAC-N) **ARACHNOVA THERAPEUTICS LTD**; (BARD-I) BARDSLEY H J; (CAVA-I) CAVALLA D; (GRIS-I) GRISTWOOD R W
CYC 101
PI WO 2002094249 A1 20021128 (200315)* EN 4 A61K031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
EP 1390022 A1 20040225 (200415) EN A61K031-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
US 2004048874 A1 20040311 (200419) A61K031-519
BR 2002009956 A 20040420 (200428) A61K031-00
KR 2004012808 A 20040211 (200438) A61K031-519

JP 2004168692 A 20040617 (200441)# 6 A61K031-519
AU 2002307872 A1 20021203 (200452) A61K031-00
CN 1511029 A 20040707 (200467) A61K031-00
JP 2004531557 W 20041014 (200467) 13 A61K031-519
AU 2002307872 B2 20041007 (200480) A61K031-00
AU 2005200045 A1 20050127 (200525)# A61K031-00
JP 3749519 B2 20060301 (200617) 5 A61K031-519

ADT WO 2002094249 A1 WO 2002-GB2388 20020521; EP 1390022 A1 EP 2002-771681 20020521, WO 2002-GB2388 20020521; US 2004048874 A1 CIP of WO 2002-GB2388 20020521, US 2003-617847 20030710; BR 2002009956 A BR 2002-9956 20020521, WO 2002-GB2388 20020521; KR 2004012808 A KR 2003-714542 20031107; JP 2004168692 A JP 2002-335342 20021119; AU 2002307872 A1 AU 2002-307872 20020521; CN 1511029 A CN 2002-810378 20020521; JP 2004531557 W JP 2002-590968 20020521, WO 2002-GB2388 20020521; AU 2002307872 B2 AU 2002-307872 20020521; AU 2005200045 A1 Div ex AU 2002-307872 20020521, AU 2005-200045 20050107; JP 3749519 B2 JP 2002-590968 20020521, WO 2002-GB2388 20020521

FDT EP 1390022 A1 Based on WO 2002094249; BR 2002009956 A Based on WO 2002094249; AU 2002307872 A1 Based on WO 2002094249; JP 2004531557 W Based on WO 2002094249; AU 2002307872 B2 Previous Publ. AU 2002307872, Based on WO 2002094249; JP 3749519 B2 Previous Publ. JP 2004531557, Based on WO 2002094249

PRAI GB 2001-12494 20010522; GB 2002-16027 20020710; JP 2002-335342 20021119; AU 2005-200045 20050107

IC ICM A61K031-00; A61K031-519
ICS A61P025-00; A61P025-02; A61P025-04; A61P025-24; A61P029-00; A61P043-00; C07D495-00; C07D495-04

AB WO 200294249 A UPAB: 20060310
NOVELTY - Use of **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-D)pyrimidine** or its salt in the manufacture of medicament for the treatment of pain.
ACTIVITY - Analgesic.
Three groups (13 in each group) of rat received vehicle (0 mg/kg), indomethacin (1 mg/kg) or **4-(2-fluorophenyl)-6-methyl-2-(1-piperazinyl)thieno(2,3-D)pyrimidine** (**MCI-225**) (30 mg/kg). Inflammatory pain was induced and the pain threshold of inflamed paw was measured using a paw pressure analgesiometer. The threshold for paw withdrawal was measured in grams at 1 and 3 hours post dose. The pain threshold (g) for **MCI-225**/indomethacin/vehicle at 1 and 3 hours were 32.3/56.5/-11.5 and 66.9/65.8/-11.5 respectively.
The results showed that **MCI-225** increase the pain threshold and thus are useful for treatment of pain.
MECHANISM OF ACTION - None given.
USE - In manufacture of medicament for treatment of pain such as nociceptive pain or neuropathic pain (claimed).
ADVANTAGE - The composition actively reduces the pain.
Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B06-F03; B14-C01
TECH UPTX: 20030303
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Compound: The salt is monohydrate hydrochloride.
ABEX UPTX: 20030303
ADMINISTRATION - The composition is administered orally, sublingually/buccally, transdermally, intramuscularly, intranasally, rectally, rectally, parenterally, subcutaneously, pulmonary or topically

in a dosage of 0.1 - 5 mg.

EXAMPLE - None given.

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=> d his

     (FILE 'HOME' ENTERED AT 15:27:09 ON 04 MAY 2006)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 15:27:17 ON 04 MAY 2006
L1             1 S (WO2003-GB3720 OR GB2002-20064 OR GB2003-16115)/AP,PRN
               E CAVALLA D/AU
L2            95 S E3-E6
               E GRISTWOOD R/AU
L3            55 S E4-E7
               E ARACHNOVA/PA,CS
L4            46 S E3-E12
L5             9 S 4 2 FLUOROPHENYL 6 METHYL 2 1 PIPERAZIN? THIENO 2 3 D PYRIMID
L6             5 S L5 AND L1-L4
L7             9 S L1,L6,L5
               SEL RN

     FILE 'REGISTRY' ENTERED AT 15:30:10 ON 04 MAY 2006
L8            11 S E1-E11
L9             3 S L8 AND C17H17FN4S
L10            3 S 99487-25-9/CRN
L11            4 S L10,L9

     FILE 'HCAOLD' ENTERED AT 15:31:32 ON 04 MAY 2006
L12            0 S L11

     FILE 'HCAPLUS' ENTERED AT 15:31:34 ON 04 MAY 2006
L13           14 S MCI 225 OR MCI225
L14           22 S L11
L15           22 S L7,L13,L14
L16           19 S L15 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L17            5 S L1-L4 AND L15
L18            5 S L17 AND L16
L19            3 S L15 AND (ABUS? OR ?OBESIT? OR ?OBESE? OR WEIGHT(L)(GAIN? OR L
L20            6 S L15 AND (BODY(L)WEIGHT OR ?PARKINSON? OR ?FIBROMYALG? OR STRO
L21            6 S L15 AND MENTAL?
L22           10 S L19-L21
               E MENTAL/CT
L23            7 S L15 AND E4+OLD,NT
L24            1 S L15 AND E22+OLD,NT
L25            0 S L15 AND E23
L26            5 S L15 AND (E28 OR E29+OLD,NT)
L27            0 S L15 AND E89
               E OBESITY/CT
L28            1 S L15 AND E3-E7
L29            1 S L15 AND E3+OLD,NT
               E BODY WEIGHT/CT
L30            1 S L15 AND E3-E5
L31            1 S L15 AND E3+OLD,NT
               E SUBSTANCE ABUSE/CT
               E E3+ALL
L32            1 S L15 AND E2
               E DRUGS OF ABUSE/CT
L33            1 S L15 AND E3+OLD,NT
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                E DRUG ADDICTION/CT
L34           0 S L15 AND E3+OLD,NT
                E E3+ALL
L35           1 S L15 AND E2+OLD,NT
                E SMOKING/CT
L36           0 S L15 AND E3+OLD,NT
L37           0 S L15 AND E9
                E E6+ALL
L38           1 S L15 AND E2
                E TOBACCO/CT
L39           0 S L15 AND E3
L40           0 S L15 AND E267+OLD,NT
L41           1 S L15 AND E282+OLD,NT
L42           0 S L15 AND E285+OLD,NT
                E EATING DISORDER/CT
L43           1 S L15 AND E4
                E E4+ALL
L44           0 S L15 AND E2
                E OBSESSIVE/CT
                E E6+ALL
L45           1 S L15 AND E2
                E PREMENSTRUAL/CT
                E E5+ALL
L46           1 S L15 AND E2
                E MIGRAINE/CT
L47           0 S L15 AND E3
                E E3+ALL
L48           1 S L15 AND E2
                E HEADACHE/CT
L49           1 S L15 AND E3+OLD,NT
                E NAUSEA/CT
L50           2 S L15 AND E3+OLD,NT
                E VOMIT/CT
L51           2 S L15 AND E4+OLD,NT
                E EMESIS/CT
                E E3+ALL
                E E3+ALL
L52           2 S L15 AND E2,E3,E5,E7
                E FATIGUE/CT
L53           1 S L15 AND E3,E11+OLD,NT
L54           0 S L15 AND E17
                E FIBROMYALGIA/CT
                E E3+ALL
L55           2 S L15 AND E2
                E PARKSINSON/CT
                E PARKINSON/CT
L56           1 S L15 AND E7+OLD,NT
                E STROKE/CT
                E E3+ALL
L57           1 S L15 AND E2
                E SCHIZOPHRENIA/CT
L58           1 S L15 AND E3+OLD,NT
L59          12 S L23-L58
L60          12 S L22,L59
L61          15 S L17,L60
L62           7 S L15 NOT L61
L63           5 S L62 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L64          20 S L61,L63

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     FILE 'HCAPLUS' ENTERED AT 15:48:36 ON 04 MAY 2006

     FILE 'EMBASE' ENTERED AT 15:49:02 ON 04 MAY 2006
L65           23 S L5
L66           23 S L13
L67           23 S L11
L68           23 S L65-L67
L69           18 S L68 AND PY<=2002

     FILE 'MEDLINE' ENTERED AT 15:51:10 ON 04 MAY 2006
L70            9 S L5 OR L13 OR L11

     FILE 'BIOSIS' ENTERED AT 15:51:38 ON 04 MAY 2006
L71           16 S L70
L72           16 S L71 AND PY<=2002

     FILE 'WPIX' ENTERED AT 15:52:23 ON 04 MAY 2006
L73            8 S L5
L74            3 S L13
L75           10 S L73,L74
                 E RA9D3/SDCN
L76            1 S E32
L77            1 S RABMLT/SDCN
                 E MCI/CN
L78            1 S E9
L79            3 S L76-L78
L80            9 S (RA9D3X OR RABMLT OR RAIXFX)/DCN OR (650404-0-0-0 OR 650404-0
L81           10 S L75,L80
L82            4 S L81 AND (CAVALLA ? OR GRISTWOOD ?)/AU
L83            4 S L81 AND ARACHNOVA?/PA
L84            4 S L82,L83
L85            5 S L81 AND (A61P001 OR A61P003 OR A61P015 OR A61P025 OR A61P031
L86            1 S L85 AND 2004-257344/AN
L87            4 S L84,L86
L88            4 S L81 NOT L82-L87
L89            1 S L88 AND 2004-561744/AN
L90            5 S L87,L89
L91            2 S L75 NOT L88-L90

     FILE 'WPIX' ENTERED AT 16:01:42 ON 04 MAY 2006

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